

**CHEMICAL SECURITY—A RISING CONCERN FOR  
AMERICA: EXAMINATION OF THE DEPARTMENT'S  
CHEMICAL SECURITY REGULATIONS AND ITS  
EFFECT ON THE PUBLIC AND PRIVATE SECTOR**

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**HEARING**

BEFORE THE

**SUBCOMMITTEE ON TRANSPORTATION  
SECURITY AND INFRASTRUCTURE  
PROTECTION**

OF THE

**COMMITTEE ON HOMELAND SECURITY  
HOUSE OF REPRESENTATIVES**

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FOR AMERICA: EXAMINATION OF THE  
DEPARTMENT'S CHEMICAL SECURITY  
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PUBLIC AND PRIVATE SECTOR**

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**Tuesday, July 24, 2007**

U.S. HOUSE OF REPRESENTATIVES,  
COMMITTEE ON HOMELAND SECURITY,  
SUBCOMMITTEE ON TRANSPORTATION SECURITY AND  
INFRASTRUCTURE PROTECTION,  
*Washington, DC.*

The subcommittee met, pursuant to call, at 1:55 p.m., in Room 311, Cannon House Office Building, Hon. Sheila Jackson Lee [chairwoman of the subcommittee] presiding.

Present: Representatives Jackson Lee, Markey and Lungren.

Ms. JACKSON LEE. The subcommittee will come to order.

The subcommittee will begin its meeting today and receive testimony on the Department's chemical security regulations and its effect on the public and private sectors.

Let me thank this well-attended audience for their enormous courtesies. Part of the obligation of Members cannot be done by proxy. Though I was in the Senate last week, and I think both the ranking member and myself were overwhelmed with the creativity of proxies that the Senate has the ability to utilize. But we do not use them here; and, therefore, we had a series of votes. We thank you for your indulgence and for your courtesies.

Mr. Secretary, we thank you very much. You have been busy here with us over a number of weeks, and we thank you for your attentiveness.

Let me, before I start, make a non-hearing and a non-committee statement, but it is one that is the jurisdiction of this committee, and, frankly, I am going to put it on the record.

I was appalled at the incident in Phoenix, Arizona. It is a Homeland Security matter, and it is a matter for this committee. There are several representations of cure that have been represented to this committee, but it will be my intent—and I know a number of members on the full committee are enormously involved in this issue and, frankly, have been proven right—to secure a report on the Nation's airports as relates to a 24-hour/7-day-a-week response as relates to employees across America. I think the incident bears on intolerable, and if there are any other incidences like this, it is this committee and the Department that need to be fully aware

and to intervene immediately. This is no time for security gaps like that to be occurring in this country.

With that being said, this is an important meeting, Mr. Secretary, an important hearing. In the course of just a couple of weeks, I have heard from a number of constituents, many who are interested in how we can work together and realize, in the new climate to which we now are exposed now some 6 years after 9/11 with an increased interest by those who would do us harm, that preparation and preparedness is key. They also recognize that with the critical infrastructure aspect of this committee that involves chemical security facilities, most of it lodged in the private sector, there must be a partnership and there must be responsibility.

So let me again say there has been, however, a great deal of curiosity, even skepticism, about how effectively the Department of Homeland Security could implement these regulations as it has not had to do so in the past with regard to other sectors. I believe that, because this is the Department's first attempt in a regulatory role, oversight is vital.

As I have said, a large part of this sector is in the private sector, and I would hope that as they would question you that they will be questioning themselves so that they realize that none of these items are subject to games that we might tend to play. Whose side are you on? It is all about securing America.

I believe that because this is the Department's first attempt in a regulatory role we must be a partner in this, and that means this committee and the full committee. The committee must explore the chemical security regulations implemented by the Department. We have that responsibility under the Homeland Security appropriations bill of fiscal year 2007.

Specifically, the committee is interested in the Top-Screen process, which, as you all know, is the initial phase of the regulatory requirements. We are concerned about the breadth of entities that will be required to fill out a Top-Screen application, and we would like some clarifying answers on the Department's preparation for this process. There are many elements of this issue, and we welcome the panels' insights.

First, we must know how the Department decided upon which chemicals to include and their amounts. Second, was the Department prepared for entities such as universities and small businesses to be subject to the Top-Screen process? The committee needs to confirm that the Department has the necessary resources to perform these tasks and to thoughtfully and thoroughly review the questionnaires and assessments.

We also need to know whether we have gone far enough, and there is a great deal of interest in writing a comprehensive chemical security bill. Why? I will repeat it over and over again: Eighty-five percent of the critical infrastructure, which includes chemical security or chemical plants, is in the private sector.

If the Department is lacking resources or having problems, the committee must know, because chemical security is vital to our national security. In fact, in any discussions that have now been publicized, we know it is enormously vital. They are crucial in their security—the entity's security—and of the people who work there. It is crucial to the security of this Nation. Even large companies via

the Chemical Sector Coordinating Council have expressed concerns about the regulatory regime's approach. That is why this committee is holding hearings, and we are open to their concerns, but I, personally, am not open to countering or to denying or to undermining the security of this Nation.

The committee should discern how the Department is defining risks, the methodologies it is using, why it is requiring facilities in the top three tiers to only use the Department's vulnerability act assessment and not the assessment that many companies already use. This duplication of resources seems especially perplexing. However, I am open-minded. I am willing to listen to the reasoning behind it so that we can find common ground.

There is no doubt that the private sector wants to be secure. They are Americans, and so there must be a common ground to be able to solve some of these questions that are being raised.

Many advocacy groups, chemical companies and State and local governments have expressed frustration about whether these regulations preempt State and local chemical security regulations, some of which happen to be better than the Federal criteria standards right now. The appropriations bill was silent on preemption, but, nevertheless, the regulations seem to imply that the regulations will preempt State and local laws. Dow Chemical expressed to the committee that it is supportive of State and local laws that may be more forceful than the Federal regulations. There are several circulating proposals to ensure that these regulations do not preempt State and local laws.

In the Homeland Security Appropriations Act for fiscal year 2008, the House made clear that the Department should not preempt State chemical security laws unless they are in direct conflict with the Federal regulations.

There are also concerns about the introduction of a new category of pseudo-classified information called Chemical Terrorism Vulnerability Information, or CVI. The Department has created multiple forms of classified information that may or may not be necessary and merely seem to confuse interested parties.

Again, this is the time to make the case or to clarify so that the ultimate goal is the security of all of us here in America and particularly those physical plants dealing with chemicals that can be the genesis of a horrific terrorist act.

In the Homeland Security Appropriations Act for fiscal year 2008, language was included to instruct the Department not to create a new class of protected information but to use the Sensitive Security Information category, or SSI, already used for sites located at maritime ports, regulated under the Maritime Transportation Security Act.

In the area of worker protection and participation, we would like to see protections provided for whistle-blowers as well as the inclusion of chemical security workers in creating the vulnerability assessments and the site security plans. It appears that workers are not included in this process, and their knowledge and positions on the front lines would be very useful to create more effective regulations. I am also interested, additionally, in the training of these workers and the criteria for training the workers and whether or not that is part of an extended and coordinated practice.

We also want to know how useful the Chemical Sector Coordinating Council and Chemical Sector Specific Plan under the NIPP were in creating and in implementing regulations. These regulations seem to provide a perfect opportunity to see a real-world example of how effective these plans and the councils are.

As you can see, we have a lot to discuss. I, along with other members of the subcommittee, am seriously committed to protecting critical infrastructure and to understanding how the private sector is protecting our vital assets. However, I am not willing to leave it totally to the private sector or to the Federal Government alone. This committee—this full committee and this subcommittee must be intimately involved. As I have often said, the bottom line is that, if an horrific act were to occur, the name that most would look to is the Homeland Security Department and the Homeland Security Committee.

Again, today, we want to explore what steps the private sector has taken to protect its infrastructure and the Department's role in this process. We look forward to the witnesses' testimony and learning how these different entities protect themselves from threats and what role the Congress can play and how we can fortify the relationship to protect the United States from a chemical attack.

PREPARED STATEMENT OF THE HONORABLE SHEILA JACKSON LEE, CHAIRWOMAN,  
SUBCOMMITTEE ON TRANSPORTATION SECURITY AND INFRASTRUCTURE PROTECTION

JULY 24, 2007

There has been, however, a great deal of curiosity—even skepticism—about how effectively DHS could implement these regulations, as it has not had to do so in the past with regard to other sectors. I believe that because this is the Department's first attempt in a regulatory role, oversight is vital. The Committee must explore the chemical security regulations implemented by the Department under the Homeland Security Appropriations bill of FY07.

Specifically, the Committee is interested in the Top Screen process, which, as you all know, is the initial phase of the regulatory requirements. We are concerned about the breadth of entities that will be required to fill out a Top Screen application and would like some clarifying answers on the Department's preparation for this process.

There are many elements of this issue and we welcome the panel's insight.

- First, we must know how the department decided upon which chemicals to include and their amounts.
- Second, was the Department prepared for entities, such as universities and small businesses, to be subject to the Top Screen process?
- The Committee needs to confirm that the Department has the necessary resources to perform these tasks and to thoughtfully and thoroughly review the questionnaires and assessments.

If the Department is lacking resources or having problems, the Committee must know because chemical security is vital to our national security.

Even large companies, via the Chemical Sector Coordinating Council, have expressed concerns about the regulatory regime's approach. The Committee should discern how the Department is defining risk, the methodologies it is using, and why it is requiring facilities in the top three tiers to only use the Department's vulnerability assessment, and not the assessments that many companies already use. This duplication of resources seems especially perplexing.

Many advocacy groups, chemical companies, and State and local governments have expressed frustration about whether these regulations preempt State and local chemical security regulations. The Appropriations bill was silent on preemption but, nevertheless, the regulations seem to imply that the regulations will preempt State and local laws. Dow Chemical expressed to the Committee that it is supportive of State and local laws that may be more forceful than the Federal regulations. There are several circulating proposals to ensure that these regulations do not preempt State and local laws. In the Homeland Security Appropriations Act for Fiscal Year



2008, the House made clear that the Department should not preempt State chemical security laws unless they are in direct conflict with the Federal regulations.

There are also concerns about the introduction of a new category of pseudo-classified information called "Chemical-terrorism Vulnerability Information," or CVI. The Department has created multiple forms of classified information that do not seem necessary, and merely seem to confuse interested parties. In the Homeland Security Appropriations Act for FY 2008, language was included to instruct the Department not to create a new class of protected information but to use the "Sensitive Security Information" category, or SSI, already used for sites located at maritime ports regulated under the Maritime Transportation Security Act (MTSA).

In the area of worker protection and participation, we would like to see protections provided for whistleblowers as well as the inclusion of chemical security workers in creating the vulnerability assessments and the Site Security Plans. It appears that workers are not included in this process, and their knowledge and position on the front-lines could be very useful to create more effective regulations.

We also want to know how useful the Chemical Sector Coordinating Council and Chemical Sector Specific Plan (under the NIPP) were in creating and implementing the regulations. These regulations seem to provide a perfect opportunity to see a real-world example of how effective these plans and councils are. As you can see we have a lot to discuss.

I, along with other members of this subcommittee, am seriously committed to protecting critical infrastructure and understanding how the private sector is protecting our vital assets.

Again, today we want to explore what steps the private sector has taken to protect its infrastructure and the Department's role in this process. I look forward to the witnesses' testimony and learning about how these different entities protect themselves from threats and what role Congress can play to fortify and protect the United States' from a chemical attack.

Ms. JACKSON LEE. The Chair is pleased now to recognize the ranking member, the gentleman from California, for his opening statement.

Mr. LUNGREN. Thank you very much, Chairwoman Jackson Lee.

Because of the crazy schedule going on today around here, I will have to, unfortunately, leave at 2:45, so I hope to hear as much as I possibly can from both panels.

I must say it is fitting that our subcommittee be the first to review the Department of Homeland Security's efforts in implementing our committee's bipartisan chemical security legislation which was enacted just last year. The authority to regulate the chemical industry is, indeed, historic. For the first time, all chemical facilities will be assessed, Top-Screened for potential consequences and assigned to risk based tiers because of specific security concerns.

The Department, as I understand, estimates that there are 40,000 facilities which will complete this assessment process. Those facilities which qualify as tiers 1, 2 or 3 will be required to conduct a facility vulnerability assessment and to submit a site security plan to address those vulnerabilities. This is in keeping with the legislation which we enacted last year where we were trying to ensure that we targeted our greatest resources at the greatest risks.

I am pleased that the regulations recently issued under our legislation were both risk based and performance based. I believe this will prevent us from overreaching and from enacting inflexible and unreasonable requirements on our Nation's chemical facilities. The last thing we want to do is to somehow suppress the ingenuity and creativity of the private sector in coming up with the necessary security measures, and I think we have avoided this so long as we have both risk-based and performance-based assessments guiding our conduct. Our goal and that of these regulations should be to

strike the right balance between securing our high-risk chemical facilities while ensuring that they continue their vital service to the American economy.

Reference was made by the chairwoman to the legislation or to the language contained in legislation this year which changes the carefully constructed language that we had last year to try and establish a balance between the Federal, State and local governments. Last year, we came upon language which has been utilized by the courts before. I cannot give you it exactly, but I believe it is something to the effect that State and local laws, so long as they did not frustrate the Federal intent or purpose, would be allowed. That language is language which has been utilized by the courts in the past to determine the relationship among the different levels of government, and I am concerned that the new language, if it is completed in legislation with the Senate, would cause us to have disputes in the courts as to what that language actually means.

Unfortunately, it seems, to me, it is too early in this regulatory effort to make a full determination as to the success or failure of the Department in implementing the regulatory scheme. To be fair, we should allow these regulations to be fully implemented before we second-guess their effectiveness. Nonetheless, I am interested to hear from you, Colonel Stephan, on exactly what you have done and how you are going forward with it.

Also, as to the second panel, I have not had the opportunity to meet the members of the panel, but I have familiarity with the Dow Chemical Company at one of their major plants in a previous district that I represented. At that time, I recall that they were ahead of the curve on the question of safety and security, and I would look forward to hearing what they are doing in the present environment as well.

Thank you very much.

Ms. JACKSON LEE. Thank you, Mr. Lungren, for your remarks.

The chairwoman acknowledges that other members of the subcommittee are reminded that, under the committee rules, opening statements may be submitted for the record, and I would ask, at this time, unanimous consent that we would continue as if we had a quorum in the absence of Mr. Lungren.

Any objection?

Mr. LUNGREN. No objection.

Ms. JACKSON LEE. None being heard, we thank you very much so that we can complete this particular hearing.

It is, again, a pleasure to welcome Colonel Robert Stephan. Colonel Stephan is the Assistant Secretary for the Office of Infrastructure Protection with the Department of Homeland Security. Prior to joining the Department in 2005, Colonel Stephan was the Senior Director for Critical Infrastructure Protection in the Executive Office of the President. Colonel Stephan had a distinguished 24-year career with the Air Force.

We welcome you. We have seen you quite frequently. We thank you for the important work that you have done on critical infrastructure, and we are very glad that you are here today, and we thank you for your military service.

So, without objection, the witness's full statement will be inserted into the record.

We welcome you again. Thank you for your testimony.

**STATEMENT OF COL. BOB STEPHAN, ASSISTANT SECRETARY,  
INFRASTRUCTURE PROTECTION, U.S. DEPARTMENT OF  
HOMELAND SECURITY**

Colonel STEPHAN. Madam Chairwoman and Ranking Member Lungren, thank you very much for the opportunity to come and talk with you today about an important topic, in fact, a topic that is very much at the center of our radar screen at the Department of Homeland Security and within my office in particular.

I also wanted to thank you both personally for your leadership in bringing this legislative authority to light—this regulatory authority to light—and for your continued support in ensuring the success of its implementation.

As you know, securing the chemical sector represents an immense undertaking, involving a national effort including all levels of government, industry, multiple other organization entities and the American public at large. Integrated and effective partnerships among all stakeholders are essential to securing our national critical infrastructures, particularly including high-risk chemical facilities across the Nation.

The chemical sector has nearly one million employees and represents about \$500 billion a year in revenue. It converts raw materials into more than 70,000 diverse products, many of which are critical to the health and well-being of our Nation's citizens, to the security, to the economy, to the lives of everyday Americans.

The contributions the chemical sector makes to the Nation are great, but they are certainly not without risk, as both of you have highlighted. Many chemicals, either in their base form or combined with others, could cause significant harm to people and to the environment if released or removed from a facility and weaponized in some fashion. Additionally, a terrorist attack or a natural disaster could significantly disrupt production at key facilities, causing very important supply chain issues that could be harmful to the economy on a regional or on a national scale.

The Department's vision for the chemical sector is as an economically competitive industry with a sustainable security posture achieved using risk-based assessments, industry best practices, and a comprehensive information-sharing environment between industry and government. This vision also includes, recently, the implementation of a tailored new regulatory authority, the Chemical Facility Anti-Terrorism Standards, more affectionately known as the CFATS, aimed at securing the most high-risk sites around the country; and a combination of voluntary industry efforts and risk-based public-private collaboration inside of regulatory space is what we are going to use to enable the implementation of this overarching vision.

As you all are well aware, our Appropriations Act language from last year directed us to develop and to implement a regulatory framework for high-risk facilities in the chemical sector. The Act gives DHS authority to require high-risk chemical plants to complete vulnerability assessments, to develop site security plans and to implement protective measures necessary to meet performance-based standards. The Act gave DHS 6 months from the day the

President signed the bill in early April, 2007, to promulgate interim final regulations. DHS released these final regulations, the CFATS, on April 9th of this year.

The following core principles guided the development of this regulatory framework:

Consultation with industry experts, academic specialists, engineering associations, and nongovernmental organizations in a close public/private sector partnership. We have also leveraged State and local organizations, such as the New Jersey State Government at various levels and the New Jersey State Chemical Council, to make sure we have effectively leveraged that vital partnership.

Tiering. Not all facilities represent the same level of risk, and the most scrutiny should be focused on those that, if attacked, of course, represent the most risk; and we should focus on complicating the lives of our terrorists, adversaries in every single thing we do in this program.

Performance standards should be reasonable, clear and equitable and achieve the balance that Congressman Lungren spoke to in terms of achieving security while preserving the economic vitality and competitiveness of the industry.

Finally, in implementing this regulation, we should recognize the very significant progress that multiple entities across the sector have made since the September 11th attacks to provide for their own security as well as the many voluntary programs they have joined in partnership with DHS and other Federal and State and local agencies to get the job done.

In September of 2006, we released an Advance Notice of Rule-making that contained a draft regulation for public comment. Through this process, we received more than 1,300 pages of comments from over 106 separate submitters. We have extensively reviewed these comments and have considered them in the final regulation.

Inside the interim final rule, we included a second public comment period. It was on a very important piece that I would like to go into more detail on with you during the Q and A session. It was specific to Appendix A, which details specific chemicals of concern and screening threshold quantities that we intend to regulate through this program.

The comment period closed out in early May, and it produced more than 4,000 individual comments for our review. As the Secretary has noted, we are reviewing these comments very carefully and are closely considering them as we work to finalize the Appendix. In fact, the internal DHS clearance process closed at noon today, Madam Chairwoman, I am happy to report, and the final Appendix A should then be skirting its way through the OMB process in the coming weeks.

Issues that informed our initial look at the chemicals of concern and in developing CFATS included toxic release quantities, the potential for theft or diversion, the potential for sabotage or contamination, and the economic mission/government mission impact across the country.

To implement and execute these regulations, the DHS must, in a very complicated manner, define the regulated community or determine which facilities are high risk. To facilitate this process, we

developed a screening tool called the Chemical Security Assessment Tool, or CSAT. CSAT employs an easy-to-use, kind of like a Turbo Tax, online, consequence-based Top-Screen tool. CSAT builds upon the functional assessment tool developed by DHS with industry earlier referred to as RAMCAP, or Risk Analysis and Management for Critical Asset Protection. Under the regulatory program, chemical facilities initially designated high risk must complete this online consequence assessment tool, and this information we will use to factor into the final tiering of the facilities.

Using the results of the CSAT tools, all high-risk facilities will be placed into one of four tiers based upon risk. The higher a facility's tier, the more robust measures they will need to incorporate and the more frequent and rigorous their inspection cycles will be. Inspections will both validate the adequacy of a facility's site security plan as well as verify the implementation of the specific protective measures identified therein.

DHS is using a phased approach, which is very important in implementing the regulations, with implementation at the highest-risk facilities beginning in an expedited manner and with implementation at lower-risk facilities occurring in a sequential fashion.

On June 8th, the CSAT Top-Screen went live, and the Chemical Vulnerability Information program went into effect. On June 11th, we reached out to the State Homeland Security Advisor community and to the Chemical and Oil and Natural Gas Government Coordinating Councils and to their corresponding private sector counterparts to brief them fully on program implementation. We kicked off what we call "Phase 1(a)," during the week of June 11—

Ms. JACKSON LEE. Colonel, are you wrapping up soon?

Colonel STEPHAN. Yes, ma'am, I was.

Ms. JACKSON LEE. Okay. Thank you.

Colonel STEPHAN. —making calls to approximately 50 select facilities to inform them of the inclusion in an accelerated, fast-phased phase 1 implementation. This outreach was at the corporate level and expected to result in a collaborative effort to complete the CSAT Top-Screen in an expedited fashion.

Now I have, also, other details regarding specific implementation steps and very important voluntary efforts such as the Chemical Comprehensive Review Plan program, the Buffer Zone Protection Plan program, various types of information-sharing programs and mechanisms/coordinating structures we have established—for instance, management—that are all catalogued in very great detail inside my written testimony; and, of course, that is submitted for your review and comment.

Ma'am, barring any further issues, I will then turn the floor back to you for questions and answers on this very important topic.

Again, I thank the leadership of this subcommittee for helping drive this process forward. We will look forward to partnering with you as we begin to implement now this very, very complex regulation and make sure that we absolutely do the right thing. My people and I, we are a "no fail" in terms of this mission. You should have no concern about our ability to do this, because we are the right people to do this task, and you have our pledge that we are going to do it the right way. We also understand we are not going

to get a second chance to do this the right way, and so we are fully committed to doing this.

Thank you again for your continued support as we move through this together.

Ms. JACKSON LEE. Well, I am sure, Colonel, that the Nation is grateful for your enthusiasm. We know that the entirety of your statement, if there is more remaining, will be submitted into the record, and we thank you for the passion in which you have presented your testimony.

[The statement of Colonel Stephan follows:]

PREPARED STATEMENT OF COLONEL ROBERT B. STEPHAN

Thank you, Chairwoman Jackson-Lee, Congressman Lungren, and distinguished members of the Subcommittee. It is a pleasure to appear before you today to discuss chemical security. Open dialogue between security partners is a key element in advancing the security of our nation, and I appreciate this opportunity to address you on such a timely and important topic. Securing the Chemical Sector represents an immense undertaking that involves a national effort including all levels of government, industry, and the public. Integrated and effective partnerships among all stakeholders—federal, state, local, and private sector—are essential to securing our national critical infrastructures, including high-risk chemical facilities.

**The Chemical Sector and the Sector Specific Plan**

The Chemical Sector has nearly one million employees and represents \$500 billion a year in revenue. It converts raw materials into more than 70,000 diverse products, many of which are critical to the health and well-being of our nation's citizens, to security, and to the economy. The contributions the Chemical Sector makes to the Nation are great, but they are not without risk. The economic and strategic value of the industry may make it an attractive target for terrorists. Many chemicals, either in their base form or when combined with other chemicals, could cause significant harm to people and the environment if released or removed from a facility and weaponized in some fashion. Additionally, a terrorist attack, natural disaster, or industrial accident could significantly disrupt production at key facilities, causing supply chain issues that could be harmful to the economy on a regional, national, or global scale.

The Department of Homeland Security's (DHS') vision for the Chemical Sector is that of an economically competitive industry with a sustainable security posture. This can be achieved by using risk-based assessments, industry best practices, and a comprehensive information sharing environment between industry and government. This vision also includes the implementation of a tailored new regulatory authority—the Chemical Facility Anti-Terrorism Standards (CFATS)—aimed at securing the most high-risk sites around the country. It is the combination of voluntary industry efforts and risk-based public-private collaboration inside and outside of regulatory space that will enable implementation of this vision.

**Industry Efforts**

In the nearly six years since the terrorist attacks on September 11, 2001, the great majority of industry owners and operators have taken actions to assess facility vulnerabilities and put in place a wide variety of operational, physical, and cyber security measures. In fact, the Chemical Sector has invested more than \$3 billion in voluntary security measures in the aggregate since 9/11. In our experience, Chemical-Sector owners and operators generally understand the importance of integrating security into their operations as a sound and responsible business practice.

Examples of industry-led protective initiatives include:

**Responsible Care Security Code:** There is a history of collaboration within the sector on chemical safety, most notably in the American Chemistry Council's Responsible Care program supported by key industry associations. After September 11, this program was modified to include a mandatory Responsible Care Security Code for chemical facility security which requires facilities to:

- Assess vulnerabilities using methodologies developed by Sandia National Laboratories or the Center for Chemical Process Safety.
- Implement security enhancements.
- Verify physical enhancements through local officials or third parties.

Specifically, facilities are required to control vehicular and pedestrian access to sites; protect the perimeter through physical barriers, access control systems, elec-

tronic surveillance, and patrols; create, train, and rehearse security plans; ensure backup for critical chemical process systems, including offsite control rooms; work with regional stakeholders (government and emergency services) to ensure timely response and communication; and vet and access clearance for employees and contractors. The Security Code has requirements for cyber security and transportation, as well.

**Chemical Sector Cyber Security Program:** The Chemical Sector Cyber Security Program was established by the American Chemistry Council (ACC). In April 2002, ACC recognized the need for a unified plan of action to address cyber security across the sector, as well as with technology providers, supply chain partners, and other critical infrastructure industries. To accomplish this, a task force comprised of 16 high-level subject-matter experts was chartered to create the *Chemical Sector Cyber Security Strategy*. This strategy was published in September 2006 and outlines the sector's plans to continue facilitating improvements to IT and manufacturing system security.

**Sector Protective Programs:** Several industry trade associations have developed risk assessments methodologies and technical tools to support their member companies. In fact, many associations require completion of risk assessments as an integral condition of membership and safety and security stewardship. Some of the more widely used methodologies include the following.

- The National Association of Chemical Distributors (NACD) revised its Responsible Distribution Process (RDP) in April 2002 to mandate chemical security measures that address potential vulnerabilities within chemical distribution, including site and transportation security and end-use customers. Implementation and third-party verification of RDP is a condition of membership for companies belonging to NACD. RDP's security measures also require Security Vulnerability Assessments (SVAs) to be conducted with onsite, third-party verification.

- The American Petroleum Institute (API)/National Petrochemical and Refiners Association (NPRA), as part of its Facility Security Program, developed the API/NPRA methodology. This comprehensive facility SVA methodology focuses primarily on refineries and petrochemical manufacturers.

- The Chlorine Institute has developed guidance documents regarding the development of security plans by those facilities that handle chlorine rail tank cars when not under the control of a railroad. The guidance calls for an SVA and contains 36 baseline security actions with implementation recommendations and additional security actions for higher alert levels.

- The American Chemistry Council's Responsible Care Security Code also requires facilities to conduct an SVA. A facility can use the Vulnerability Assessment Methodology for Chemical Facilities developed by Sandia National Labs, the Center for Chemical Process Safety (CCPS) SVA methodology, or any other methodology determined certified by the CCPS.

- The Synthetic Organic Chemical Manufacturers Association (SOCMA) developed a computer-based tool, recognized by CCPS as meeting the SVA criteria, that is available, for free, to a wide range of facilities in the Chemical Sector. The SOCMA SVA can be used to help facilities analyze potential vulnerabilities and consider where to most effectively implement enhanced security measures.

- The Agribusiness Security Working Group—comprising the Agricultural Retailers Association, CropLife America, and the Fertilizer Institute—has produced a web-based tool to assist agribusiness retailers in conducting an SVA on their retail facility and their transportation practices.

- The National Paint and Coatings Association recently amended its Coatings Care Program to include a Coatings Care Security Code to address critical areas of site security, transportation, distribution, and cyber security with appropriate management practices and guidelines.

**Security Guidance Documents:** Several of the individual members of the Chemical Sector Coordinating Council, under the National Infrastructure Protection Plan framework, have developed security guidance documents specific to the sub-sector they represent. Examples include the following:

- The Institute of Makers of Explosives has published explosive industry's best practices standards. Their Safety Library Publication 27 (SLP+27) covers security in the manufacture, transportation, storage, and use of commercial explosives. SLP-27 also addresses security plans with recommendations tiered to different threat levels.

- Crop Life America sponsors the American Agronomic Stewardship Alliance (AASA), a program designed to inspect and credit more than 6,200 agricultural chemical facilities. The AASA helps to ensure third-party verification at retail sites and to certify that site security plans are developed and implemented.

- ACC, the Chlorine Institute, and SOCMA collaborated on the “Site Security Guidelines for the U.S. Chemical Industry,” available for all chemical facilities as a condition of membership and safety and security stewardship.

#### **Public-Private Sector Security Partnerships**

Under the National Infrastructure Protection Plan (NIPP), each sector has developed a Sector-Specific Plan, or SSP, which details how the NIPP risk analysis and risk management framework and information sharing network will be tailored and implemented to meet the needs of the sector. The Chemical SSP, released in May of this year, is an excellent example of the public/private partnership DHS has fostered across various levels of government and industry to improve security at chemical facilities around the country. The SSP establishes goals, objectives, and metrics that address a full spectrum of sector collaboration, information sharing, risk analysis, protection, and incident management activities. The chemical sector continues to set a strong example in implementing cooperative strategies that cost-effectively use government and industry resources to help ensure the security of high-risk facilities, systems, and networks.

Through the NIPP process, DHS established solid working relationships with a wide variety of public—and private-sector partners that make up the chemical sector. This partnership provides an effective channel for increased information sharing, risk assessment, collaborative security planning, security-related research and development, best-practices exchanges, and preparations for incident management. The Chemical Sector Coordinating Council (SCC) was formed in 2004 and currently consists of 18 trade associations, with the Chair and Vice Chair positions held by industry operators/owners. The corresponding Government Coordinating Council is comprised of several Federal departments: DHS; as well as the Departments of Commerce, Defense, and Transportation; the Environmental Protection Agency; and the Office of the Director of National Intelligence.

#### **Voluntary Security Collaboration with DHS**

The Chemical SSP describes many of the programs through which the Chemical Sector is voluntarily cooperating with DHS to protect and ensure the resiliency of its facilities and manufacturing capacity, as well as the safety of surrounding communities. These programs have also focused on collaborative planning between facility security personnel and federal, state, and local law-enforcement officials to help ensure an integrated “inside-and-outside-the-fence” approach to security.

Specific examples of these voluntary efforts include the following:

**Comprehensive Review (CR) Program.** This program brings together a federal interagency team, facility owner/operators, industry representatives, and community law-enforcement and emergency-service organizations in a collaborative planning environment. The CR is a structured, collaborative effort among federal government agencies, including DHS components such as the US Coast Guard and the Federal Emergency Management Agency, as well as the Federal Bureau of Investigation; state and local law-enforcement and emergency-management organizations; private-sector owner/operators of critical infrastructure/key resource facilities; and industry representatives. The purpose is to explore vulnerability to a potential terrorist attack, the consequences of such an attack, and the integrated capabilities needed to prevent, mitigate, and respond should such an event occur. The results of the CR are briefed to decision-makers of the site, state and local law-enforcement, and emergency-management organizations at the conclusion of the onsite review week. Gaps and potential enhancements in security and response capabilities are provided to applicable participating organizations for consideration.

The first Chemical Sector CR was conducted in Detroit in February 2006. By August 2007, CRs will have been completed in five additional regions: Chicago, Houston, Los Angeles, Northern New Jersey, and the Lower Delaware River. CRs have identified many improvements—many of them low—or no-cost—that can be implemented by Critical Infrastructure/Key Resources (CI/KR) owners/operators, as well as longer-term strategies and potential improvements that can be implemented with a mix of government and private sector resources.

**Buffer Zone Protection Program (BZPP).** This program is a targeted grant program designed to assist local law enforcement in enhancing CI/KR protection across the country. For FY 2004/2005, 248 BZPP reports for chemical facilities were submitted to DHS, which are eligible for a total of \$12,600,000 in federal grant funding against identified state or local capabilities gaps. For FY 2006, 46 chemical facilities were part of the BZPP, eligible for a total of \$10,316,000. For FY 2007, a total of 100 chemical sites are eligible for BZPP funding totaling \$19,865,000. To date, 394 chemical facilities have been eligible for a total of \$42,781,000 under BZPP. Additionally, in FY 2006, DHS launched a focused \$25 million Chemical Sector BZPP to enhance state and local jurisdictions’ ability to protect and secure iden-



tified chemical facilities in high-risk regions across the country. The Chemical BZPP program is a sector-specific effort designed to be a companion to the Chemical Sector CR initiative.

**Chemical Security Awareness Training Program.** This program features an online chemical facility security tool for use by all chemical facility employees, not just security officers. This tool is scheduled to be released by the Chemical SSA to the chemical sector in the Fall of 2007.

**Vehicle-Borne Improvised Explosive Device Training Program.** This program is under development by the Chemical SSA and the DHS Office of Bombing Prevention to provide a course for chemical facility security officers responsible for searching vehicles at chemical plants.

**Sector Exercises.** Various state-level chemical coordinating councils, in concert with the local first responders and DHS, are conducting tabletop exercises to ensure a coordinated and well-orchestrated response to an event at a chemical facility. Additionally, the Chemical Sector participates as a whole in several national-level exercise events each year. The Chemical Sector was a participant in the TOPOFF 3 national exercise, from the corporate level to the individual facility level. The sector also participated in the Department of Defense-sponsored exercise "Ardent Sentry" in May 2007, as well as the Continuity of Operations exercise called "Pinnacle" in May 2007. In each exercise, private sector entities and their government counterparts reviewed and tested communication paths and incident management plans and protocols. The Sector is currently planning its participation in the TOPOFF 4 exercise to be conducted in October of this year and is a featured thread in the upcoming Cyber Storm II exercise, which will take place in March 2008.

**Chemical Security Summit.** In June, DHS and the SCC co-sponsored the 2007 Chemical Sector Security Summit. The event was attended by 350 members of the Chemical Sector. Topics discussed included the implementation of the new CFATS, secure distribution of chemicals, and security-awareness training. Planning is under way for a similar event in 2008.

**Homeland Security Threat and Risk Analysis Center (HITRAC).** HITRAC has dramatically increased its outreach to the sector during the past two years, providing timely sector assessments, indications and warnings products, and security-related briefings. HITRAC has also worked collaboratively with the private sector to address the timeliness and content of the threat information at the classified and unclassified levels. The last classified brief was in March 2007, and the next one is scheduled for September 2007. In addition, HITRAC provides scheduled bi-weekly unclassified briefings by teleconference on threat information based on private-sector reporting, as well as law enforcement and other sources.

**Homeland Security Information Network (HSIN).** HSIN is providing an increasing amount of timely information to users in a secure, online format. Recent information that we have posted on HSIN includes information on the July 2007 United Kingdom bombings, reports on recent incidents in Iraq involving chlorine, Quarterly Suspicious Activity Reports, and 2007 pre-season hurricane impacts analysis.

### **Chemical Security Regulations**

As you are all well aware, the FY 2007 Homeland Security Appropriations Act directed DHS to develop and implement a regulatory framework for high-risk chemical facilities. Section 550 of the Act authorizes DHS to require high-risk chemical facilities to complete vulnerability assessments, develop site security plans, and implement protective measures necessary to meet DHS-defined performance standards. The Act gave DHS six months from the date the President signed the Bill, or until early April 2007, to promulgate interim final regulations implementing this authority. DHS published the interim final regulations, the CFATS, on April 9, 2007.

The following core principles guided the development of this regulatory structure:

- (1) Consultation with industry experts, academic specialists, engineering associations, and non-government organizations to ensure that our rule would be workable while accomplishing our security goals. By working closely with public experts, such as New Jersey State officials and the New Jersey Chemical Council, we believe that we have effectively leveraged vital knowledge and insight to make our regulation better.
- (2) Tiering. Not all facilities present the same level of risk and that the most scrutiny should be focused on those that, if attacked, could endanger the greatest number of lives, have the greatest economic impact, or present other very significant risks. Low-risk facilities are not a part of this framework.
- (3) Reasonable, clear, and equitable performance standards for facility security. The rule includes enforceable performance standards based on the types and se-

verity of potential risks posed by terrorists and natural disasters, and facilities should have the flexibility to select among appropriate site-specific security measures that will effectively address those risks, complicating terrorist attack planning and operational surveillance in the process.

(4) Recognition of the progress many responsible companies have made to date in raising the security bar across the Chemical Sector. Many companies have made significant capital investments in security since 9/11, and we should build upon that progress in implementing the CFATS program.

Stakeholder input—both public and private—was critical to our success in developing the regulatory framework. In December 2006, DHS released an Advanced Notice of Rulemaking containing a draft regulation for public comment. We received more than 1,300 pages of comments from more than 106 separate submitters. We extensively reviewed these comments and considered them in finalizing the regulation.

Within the Interim Final Rule, we included a second public comment period specific to “Appendix A,” which details the specific chemicals and their corresponding “Screening Threshold Quantities” that we intend to regulate through the CFATS program. This public comment period closed out on May 9, 2007, and produced more than 4,000 individual comments for our review. We have studied these comments carefully and are closely considering them as we work to finalize the Appendix. We also conducted extensive outreach with some commenters to better understand their specific concerns and issues.

Issues that informed our initial look at which chemicals could be of concern in developing CFATS included quantities released, potential for theft or diversion, potential for sabotage or contamination, and the effect that they would have on national security, government operations, or the economy.

To implement and execute the CFATS regulations, DHS must define the regulated community or determine which facilities are “high risk.” To facilitate this, DHS has developed a screening tool called the Chemical Security Assessment Tool (CSAT). The CSAT employs an easy-to-use, online consequence-based Top Screen tool. CSAT builds upon the foundational assessment tool developed by DHS with industry input referred to as the Risk Analysis and Management for Critical Asset Protection, or RAMCAP. Under the regulatory program, those facilities initially designated high-risk must complete the online CSAT SVA, which will factor into a final determination of a facility’s risk level for the purposes of the regulatory regime.

Using the results of the CSAT tools, all high-risk facilities will be placed into one of four tiers based on risk. While all high-risk facilities will be required to develop site security plans addressing their vulnerabilities, the security measures needed to meet the performance standards, as well as its inspection cycle and other regulatory requirements, will be based upon a facility’s tier level. The higher a facility’s risk tier, the more robust the measures they will need to incorporate and the more frequent and rigorous their inspections will be. Inspections will both validate the adequacy of a facility’s site security plan, as well as verify the implementation of the measures identified therein.

DHS is using a phased approach in implementing the CFATS regulations, with implementation at the highest-risk facilities beginning in an expedited manner and implementation at lower-risk facilities occurring in a sequential fashion. The following is a summary of our current activities:

On June 8, the CSAT Top Screen went live, and the Chemical-Technical Vulnerability Information program (CVI) went into effect. On June 11, we reached out to the State Homeland Security Advisors and the Chemical and Oil and Natural Gas Government Coordinating Councils and SCCs to brief them on program implementation. We kicked off Phase 1(a) the week of June 11, making calls to approximately 50 select facilities to inform them of inclusion in the Phase 1(a) program. This outreach was at the corporate level and is expected to result in a collaborative effort to complete the CSAT Top Screen in an expedited fashion for known high-risk facilities.

Follow-up letters are being sent to companies to serve as a “trigger” for the sixty-day Top Screen clock regarding the initial pool of 50 facilities. The facilities will complete an expedited CSAT process with technical assistance from DHS inspectors. The inspectors are also initiating outreach to state and local jurisdictions to begin security discussions and explain the CFATS program in detail. We anticipate approved site security plans and formal site inspections of these facilities in most cases by the end of the calendar year.

Phase 1(b) also began the week of June 11. This phase is being conducted in coordination with Chemical SCC and Oil and Natural Gas SCC to begin the Top Screen process for additional high-risk facilities *at industry discretion* prior to publication of Appendix A. This phase provides for Registration and completion of the

Top Screen, with a Help Desk available and CVI in place. It gives flexibility in schedule and reflects a partnership model focused on major corporations. A quick glance shows that our outreach efforts are working; as of July 13, the following statistics were reported by our CSAT team:

- 6,096 facilities have registered in the CSAT process and are in some phase of Top Screen completion

- 194 have submitted a completed Top Screen

Phase 2 will commence upon publication of Appendix A and will officially start the program for *all* facilities that hold chemicals of interest and meet stated screening threshold quantities. Facilities will complete Top Screens, receive preliminary tiering decisions, complete SVAs, develop site security plans, and be inspected to the plan, as appropriate per tier.

In terms of tools to assist compliance with the regulations, the Chemical Terrorism Vulnerability Information Procedures Manual and attendant training are available online at [www.dhs.gov/chemicalsecurity](http://www.dhs.gov/chemicalsecurity).

We intend Phases 1(a) and (b) to be a learning time for us, particularly for our inspectors as well as for industry. What we learn will shape further implementation of the program and help us ensure consistency in our approach across the country.

Additionally, and let me stress that this will be of benefit to all partners in the long run, DHS intends to focus a great deal of effort on fostering solid working relationships with state and local officials and first responders in jurisdictions with high-risk facilities. In fact, to effectively meet the risk-based performance elements under CFATS, facilities must demonstrate that they have active, effective working relationships with local officials in the areas of delaying and responding to a potential attack and knowing who does what during an elevated threat situation. The goal is the same as with our voluntary Comprehensive Reviews: that all stakeholders participate in the planning and implementation of protective security measures around high-risk chemical facilities.

In authorizing the CFATS program, Congress provided the Department with the ability to protect sensitive, chemical-facility information in a way that balances the need to protect the information from inappropriate and potentially harmful disclosures with the need to share the information with key stakeholders, particularly state and local officials. To implement this authority, we conducted a review of existing information security vehicles, including the Sensitive Security Information (SSI) designation. Because neither SSI nor any other existing unclassified designation provides the level of protection called for in Section 550, we developed a designation entitled Chemical-terrorism Vulnerability Information (CVI). That said, the Department does not take the creation of a new information protection regime lightly, especially in light of the President's Memorandum for Heads of Executive Departments and Agencies of December 16, 2005, entitled "Guidelines and Requirements in Support of the Information Sharing Environment," and the current efforts to standardize Controlled Unclassified Information. In addition, DHS has partnered with a working group comprising state and local Homeland Security Officers to implement CVI in a way that supports state and local information needs while ensuring the proper level of information protection to keep sensitive information out of the hands of those who may use it against us.

### Conclusion

The Federal government is collaborating extensively with the public, including members of environmental groups and the chemical sector, to actively work toward achieving our collective goals under the NIPP and the CFATS regulatory framework. In almost all cases, industry has voluntarily done a tremendous amount to ensure the security and resiliency of its facilities and systems; however, addressing the concern that such efforts have not been universally adequate in all cases for all high-risk chemical facilities, Congress has directed that the new chemical security regulations be developed and that DHS enforce them. I am hopeful that as we take on this new task, we will continue to work as partners with industry and Congress to get the job done. Given the nature of the terrorist adversary that we face, we simply cannot afford an "us-versus-them" stance toward the Chemical Sector. In this light, "we" will work smartly to implement a risk and performance-based approach to regulation and, in parallel fashion, continue to pursue the voluntary programs that have borne considerable fruit thus far. We look forward to continued cooperation with all of our industry and state and local government partners as we move towards a more secure future. Thank you for holding this important and timely hearing. I would be happy to take any questions you might have.

Ms. JACKSON LEE. Frankly, I believe that is, certainly, the appropriate passion, if you will, because we are talking about some enor-

mously dangerous possibilities even if we have the attention as we do of the industry.

For any members coming, let me remind those members, for the record—who may be on their way because of this busy schedule—that each will have 5 minutes to question the panel. At this time, I will now recognize myself for 5 minutes.

Allow me quickly, Colonel, if I can, and if your questions can be pointed, if you will, because I do want to get to the second panel, respecting the ranking member's schedule that may require him to leave. We will have a further opportunity to explore this because we are not finished with this one hearing.

You noted, as I spoke earlier in my remarks, that the fundamental approach and structure of the chemical regulations is one that we have, in fact, worked with you on based upon legislation in this session and legislation in the past Congress, and so we think the approach, certainly, has the right tone to it, the right direction, but we also raise the question about the implementation, especially the Top-Screen process.

So tell us quickly what process was used to determine chemicals of concern. That is a key element. What process was used to calculate the respective amounts that determine whether an entity is required to conduct a Top-Screen?

Colonel STEPHAN. Yes, ma'am.

We are looking at classifying chemicals as substances of concern for the purpose of this regulation based upon whether they are toxic by inhalation, release hazard, whether there are theft, diversion, sabotage-type issues. That is, can some material that we define as a "substance of concern" be removed from the site, weaponized into an IED configuration and used to kill people or can it be used to sabotage or to contaminate a public gathering place?

Also, we are taking a look at a very interesting piece of new ground. That is the impact of individual facilities and chemicals on national and regional economic production as well as national security and national or mission governance. All of the chemicals on the list were derived principally from existing sources, things that have gone through the test of time. They have been put in place by other safety regulators, principally, such as the EPA, the Department of Transportation, the Transportation Security Administration, the Department of Commerce under the Chemical Weapons—

Ms. JACKSON LEE. But you took existing information and filtered it and came up with your list?

Colonel STEPHAN. Principally, ma'am. Although there are some chemicals on the list that probably do not exist on any existing list that might be—

Ms. JACKSON LEE. Do you have scientists under your jurisdiction to be able to assist you in further determinations?

Colonel STEPHAN. Yes, ma'am. Through the Directorate of Science and Technology, we have a Chemical Security Analysis Center that is located slightly north of—

Ms. JACKSON LEE. Have you utilized that research?

Colonel STEPHAN. They have been fully engaged in the process with us, as has been the FBI's weapon of mass destruction lab and other scientific communities.

Ms. JACKSON LEE. Is the list a growing list, a list to be modified, a list to be enhanced, a list to be detracted from?

Colonel STEPHAN. Ma'am, it has approximately 300-plus chemicals in nature right now; and we are at, I think with this phase of the program, submitting this to our Secretary for his look this week; and I think, from my perspective, it is done.

Ms. JACKSON LEE. Are the chemicals on there those that, by themselves, may be nonthreatening but in combination they are threatening?

Colonel STEPHAN. That is correct, ma'am, in a mixture-type environment.

Ms. JACKSON LEE. Okay. You know, as you have heard from several entities, we have heard from several entities, including associations that represent universities. When we look at your materials in the Top-Screen survey, you query responses by the type of facility, and you give them the option to be called the "chemical manufacture petroleum refinery" or the "liquid natural gas facility." It seems as if that is what you are connecting to, but we are told that out of the procedures that we have that we have a far more expansive scope, which would include universities.

Are you surprised by the number and scope of the facilities that you are including? How are you addressing that question? Do you think, at this present time, you have enough staff to begin what will be an ongoing and extended process as these particular entities, facilities, have to come under these regulations?

Colonel STEPHAN. Yes, ma'am.

When you take the approach to regulate by chemical of concern, obviously, we have found out initially there will be a more expansive universe than the traditional big chemical plant, storage manufacturing facilities that would be included in this framework. Probably, to be honest with you, it is quite a bit more than we thought we would catch in the initial casting of the net.

For those organizations that do not clearly fit into any one of the conventional chemical facility categories, such as the universities and colleges, we have established incredible outreach with these folks to figure out what their business landscape is, their operating environment and the risk environment; and we have reached conclusions, based upon our initial threshold quantities as well as some of those that will ultimately fall inside our program authority, of how we will work with them to develop some very specialized and tailored security plans.

Ma'am, as you know, with the passage of this Act, I was not given initially any new resources to conduct this mission. As recently as, I think, about a week ago, I was able to tap into the \$12 million supplemental appropriation to be able to bring this program up to speed for where we think it needs to go in 2007. In 2008, you will see an increase in the Department's requirements over the 2007 threshold.

I have recently, with the finalization of the interim final rule, conducted a very comprehensive, 2-month-long, manpower-and-resources-required study that I am now using inside my chain of command to take a look at budget formulation for the outyears.

Ms. JACKSON LEE. But you leave expanded groups, you feel, prepared to deal with the expanded groups beyond chemical manufacturing/liquid natural gas facilities?

Colonel STEPHAN. Yes.

Ms. JACKSON LEE. With all of the large fishnet that you have, you are prepared to deal with those various organizations, universities and others?

Colonel STEPHAN. Yes, ma'am. But, again, we are going to be skimming down the initial number of fish that we caught in the first net that we cast based upon dialogue/listening sessions that we had with various elements of these new folks that——

Ms. JACKSON LEE. Well, I would like you to keep the committee advised.

Colonel STEPHAN. Yes, ma'am.

Ms. JACKSON LEE. I would like to be engaged in that process just to get an understanding of the direction that you are taking.

Colonel STEPHAN. Yes, ma'am.

Ms. JACKSON LEE. Because my time is up, let me just ask you quickly, do you plan to use contractors to review the Top-Screen questionnaires dealing with the vulnerability assessments, site security plans and to conduct site visits?

Colonel STEPHAN. Ma'am, I plan to use a combination of Federal employees, Federal leadership and some elements of contract staff to conduct the various aspects of the implementation of this regulation. I would be happy to get back with you in more specific detail based upon the knowledge base I have now.

Ms. JACKSON LEE. And you have a sufficient number, since this number of staff that would partner with contract employees who are under your jurisdiction, that means they are sited at Homeland Security? They are on site?

Colonel STEPHAN. Ma'am, I have people on site, and I also have 40 detailees from the Federal Protective Service on board that are stationed in places——

Ms. JACKSON LEE. Right, but those are Federal Government workers.

Colonel STEPHAN. Yes, ma'am. They will be doing the on-site inspections.

Ms. JACKSON LEE. Not contractors whom you have hired randomly?

Colonel STEPHAN. Well, ma'am, I do not hire contractors randomly, but during some phase of——

Ms. JACKSON LEE. Sometimes Homeland Security does hire people randomly. We see that all the time.

Colonel STEPHAN. Okay, ma'am. I will not argue that point before you today.

As we published in the IFR, the Department is also contemplating for the lower tiers of the 1—through 4-tiered structure, taking a look at a third-party auditor plan so that we can distribute some of the costs and the expertise to execute this mission across more population than my office represents at this point in time. That will be a separate rulemaking process open for public comment, of course.

Ms. JACKSON LEE. We will explore the staffing with you further.

With that, let me yield back my time and yield to the distinguished gentleman from California for his questioning of the witness.

Colonel STEPHAN. Thank you.

Mr. LUNGREN. Thank you very much.

Colonel, I remember when you first came into this position you were required to put your stamp of approval on the sector-specific plans. At that time, you related to the committee that you were not satisfied with the quality of the product and you asked for additional time. You have now reported to us on those 17 sector-specific plans, including that for the chemical industry.

Can you give me an idea of the difference in approach that was used in this particular assignment with respect to carrying out the authorization that you received last year on the chemical plants versus the sector-specific plans? You put in a different approach to the sector-specific plans from what had been there before. How did you make sure that you did not run into the same problems here that the Department had run into before?

Colonel STEPHAN. Sir, first and foremost, we established a coordinating structure through the sector coordinating councils and the government coordinating councils to make sure I had the right guys at the table. The Secretary gave us the 871 authority to put in a protected legal umbrella or framework so that I could have protected security discussions with elements of the private sector.

Then every single thing that we have developed from the voluntary side of the house has been in full collaboration with as many aspects of the chemical sector as has wanted to come to our table and to join us in helping us work our way through and sort out some very tough policy decisions, planning decisions and risk analysis-related decisions.

We are using that voluntary, collaborative framework that has been in place now for 4-1/2 years as something that has achieved some, I think, pretty significant progress across the country in terms of the security of this sector, and we are now parachuting on top of that some very surgically applied regulatory authority to those places that need more attention, and I need to be able to look you in the eye and guarantee you more of a level of security than I can today.

Mr. LUNGREN. Let me ask you about that.

From your written testimony, it is your position that the Top-Screen process will provide you with essential information necessary to locate and to secure the high-risk chemical facilities. This is information that the Department has never had before nor has had the authority to request before, correct?

Colonel STEPHAN. Yes, sir. We did not have the authority, and this will be an amazing set of very sensitive proprietary and security related information that gets not just vulnerabilities but consequences and vulnerabilities in the context of very specific threat vectors.

Mr. LUNGREN. Because it includes proprietary information and information that one company may not want to share with another or would not want to get out into the public domain because of the security, how do you assure the participants of the security of the information?

Colonel STEPHAN. Sir, because we have developed a new program. I know it is not popular to develop a new information-sharing program, but because of the requirements and the mandates in section 550 of our Appropriations Act to basically treat this information as if it were classified information in the context of enforcement and the amount of collaboration that we agree with 100 percent that is required between us and our State and local government partners in the emergency responder community and the law enforcement community across these jurisdictions that house these chemical plants, there is going to be a lot of people who, by mandate now, have potential access to this information.

I have got to be able to look these private-sector folks in the eye and guarantee from a proprietary perspective and from a security perspective that we have a very special regime in place that will not allow that information to be leaked in any way and that we are working out a process through Colonel Mike McDaniel—the State Homeland Security Advisor from Michigan—and about 30 other folks who represent the first responder, law enforcement and emergency management communities around the country what is the exact protocol in writing an MOU that we will work out with each State that will house the CFATS' regulated facility to very clearly understand that that information is protected.

Mr. LUNGREN. What is the level of confidence that you have achieved with the private sector in that?

Colonel STEPHAN. Sir, I think that we are in the initial stages of working the State and local piece with the private sector. I think the private sector is very comfortable now with the CVI—Chemical Vulnerability Information—guidelines that we published about a month and a half ago. I can say that in a similar framework and on the voluntary side of the house to protect a critical infrastructure information program, in 4 years now we have not had a single leak of one bit of data into the public at large from that program.

Mr. LUNGREN. To what extent, if any, do the chemical regulations take into account the transportation of the chemicals? That is, it is extremely important that we worry about the security of the chemicals at a site, but what about going from site to site?

Colonel STEPHAN. Sir, inside the CFATS' regulatory authority, which is basically my baby, we have specific performance standards that address the receipt of and the dispatch of a chemical substance of concern in and out of the facility and to make sure that that terminal process is secure.

A companion or a sister regulation, as you know, is in the works. It was submitted very recently into the final clearance of the department level that is under the leadership of the Transportation Security Administration, and that will basically govern the entire supply chain piece outside of fixed facilities for transportation, sir.

Mr. LUNGREN. Have your two groups been talking to one another within DHS?

Colonel STEPHAN. Yes, sir. We have exchanged hostages on each other's working groups, and we have prisoners of war protocols and everything established, and I think that process is going very well.

Our job here is to eliminate any potential seams, and I have seen those seams at the chemical plants that I have visited, and that



is the number one focus on my part, to make sure that we have no seams that can be exploited between those two regimes.

Mr. LUNGREN. Have the folks working on the transportation side had an opportunity, or some of them, to look at what you are doing and vice versa?

Colonel STEPHAN. Yes, sir. That same comment applies with respect to the United States Coast Guard and to the NTSA program.

Mr. LUNGREN. Thank you very much.

Thank you, Madam Chair.

Ms. JACKSON LEE. Thank you.

Let me, Mr. Secretary, thank you; and I will be posing this question very quickly so that we can move to the second panel. As we recognize Mr. Markey's presence here, we will yield to him in a moment. Let me ask this question that I will pose to the other witnesses.

We know that we came together, Republicans and Democrats, because chemical plants are vulnerable to terrorism. As you sit here today, we are in a work in progress, but if you had to make an assessment of the progress that these regulations have made in thwarting, blocking potential terrorist acts against the Nation's chemical plants housed mostly in the hands of the private sector, where are we? What scale are we on with respect to securing America? That can, obviously, be talked about generically, as opposed to with any classified information.

How comfortable do you feel as it relates to whether or not we are making progress in terms of thwarting potential terrorist acts against these facilities?

Colonel STEPHAN. Ma'am, I think we are making considerable progress. But, again, this regulatory framework has been alive for basically a month and a half. So, in terms of progress that I can specifically tie to this specific framework, we are going to have to let a little bit more time run its course.

If you couple what we are doing now and the collaboration we have achieved in implementing this thing at the beginning with all of the voluntary measures we have put in place—for example, right now, on some of the top 394 facilities on the EPA's RMP database list, I have buffer zone plans to the tune of the financing of \$68 million, which is the largest single contribution to any one of the infrastructure sectors under my control. We have pushed out planning that has tied State and local law enforcement emergency responder capacity to the security capacity of the plants themselves, achieving inside—and outside-the-fence synergy.

Based upon 4 1/2 years of voluntary security work with the industry, I feel we know them, they know us, we have a solid, voluntary structure in place, information-sharing mechanisms in place, needs that have been targeted to the weakest links in the process based on consequences, and now we are ready to move again to the next level on the cake, which is the security regulatory authority.

Ms. JACKSON LEE. Let me thank you.

Let me yield to the distinguished gentleman from New York—excuse me—from Massachusetts for 5 minutes, Mr. Markey.

Mr. MARKEY. Don't you ever—

Ms. JACKSON LEE. No, he does not. He said, "Don't ever."

Mr. MARKEY. Don't ever call me a Yankee fan.

Ms. JACKSON LEE. Folks, let me clarify that. He is not talking about New York. He just said do not call him a Yankee fan, and I appreciate his dilemma.

Mr. Markey for 5 minutes.

Mr. MARKEY. Welcome, sir.

As you know, al-Qa'ida and Iraq used chlorine to kill 27 people back in April. So I also noted that, in the Chlorine Institute's basic report, several successful attempted thefts of 150-pound chlorine cylinders from several water treatment facilities in California have occurred; and, as you know, cylinders of this size could pose a significant risk to the lives of everyone exposed to their contents.

Chairmen Thompson and Langevin and Solis and I sent a letter to Secretary Chertoff requesting more information on this. Although your Department has yet to respond to our letter, an article in today's Boston Globe indicates that the thefts remain unsolved and that there has been at least one additional theft of a chlorine cylinder in Texas since then.

As you know, the law that Congress passed last year exempted water treatment facilities from regulation by the Department of Homeland Security. Don't you think it is time, Colonel, for us to withdraw that exemption so that the Department of Homeland Security can move into an area where we know al-Qa'ida is trying to obtain chlorine that could cause a catastrophic event here in the United States?

Colonel STEPHAN. Sir, I will take back your request to the Secretary. I have seen the signed letter from the Secretary to you, sir; and I will go back and try to figure out where that might be in the process to make sure you get that expeditiously.

Mr. MARKEY. You have seen the signed letter that——

Colonel STEPHAN. Yes, sir. That is with Secretary Chertoff's signature that answers your letter to him, sir. I will go back and see where that is in the process between the other side of Washington and here and make sure you get prompt delivery.

Also, I think I would like to recognize——

Mr. MARKEY. Is there any reason for me to believe that the Secretary has changed his mind that the Department of Homeland Security should not have jurisdiction over this issue and that chlorine should sit out there as a threat to the American public but without Department of Homeland Security responsibility for that issue?

Colonel STEPHAN. Sir, let me paraphrase the Secretary's response back to you in that the Secretary recognizes that this exemption has caused a gap in terms of regulatory authority for similar types of chemicals and similar types of facilities between the chemical sector, which we do regulate now under CFATS, and the water and, importantly, the wastewater sectors. There is an imbalance in regulatory authority and, hence, a security gap.

There are a couple of different——

Mr. MARKEY. Well, it is a regulatory black hole through which al-Qa'ida could drive a truck loaded with chlorine into a populated area of our country. Yes, I do agree with you on that, but I have yet to hear of a request from the Bush administration as to how we are going to close down this opening that al-Qa'ida could exploit using chlorine.

Colonel STEPHAN. Sir, that security gap is acknowledged. There are many ways to kind of skin that gap in colloquialism or skin that cat.

Mr. MARKEY. Does the Secretary support or oppose the closing of this chlorine loophole that was created in the law last year?

Colonel STEPHAN. He supports the closing of the security related gap that that loophole has produced. There are several ways to do that. Those different ways are in discussion inside the administration at this point.

Mr. MARKEY. Well, I really am looking forward to reading this letter, but I am willing to bet anything that your response is not going to be accurate, that is, that the Secretary is not going to call for a closing of this exemption. I do not have any evidence thus far, and I think this hearing might have prompted somebody to start writing a letter. You would have thought I would have gotten it before the hearing. I think your answer to me is one that allows for an ambiguity to be kept until after this hearing so that you do not have to be held accountable for it.

How do you close a security gap without changing the law? How are you going to do that?

Colonel STEPHAN. Sir, you have got to give somebody authority. There is a combination of voluntary measures that can be put in place. There are lots of—

Mr. MARKEY. You are talking about giving the chlorine industry—you are saying, let us give voluntary supervisory powers to an industry that has seen massive theft of this very product, item, that can be used by al-Qa'ida for a terrorist attack; and I do not think that makes any sense to trust the industry that has not been securing these materials.

Why can't we have the Department of Homeland Security step up and say it is time for the Bush administration to provide supervision and to stop trusting an industry that has demonstrated an incapacity to, in fact, deserve that trust?

Colonel STEPHAN. Sir, in the letter from the Secretary to you, he is quite emphatic about his desire to close this security gap.

Mr. MARKEY. Is one of the things that is under consideration in the administration requiring the industry to use safer materials, that is, to use substitutes for chlorine? Is that one of the things that is under consideration?

Colonel STEPHAN. Sir, that particular issue is not a piece of the pie that is under consideration at that point.

Mr. MARKEY. Again, I think that is what, ultimately, the solution is. It is to use safer chemicals that cannot be used for terrorist purposes where possible; and it is just another thing that the Bush administration, unfortunately, has continued to defer to the industry rather than to the safety of the American public.

Mr. LUNGREN. Would the gentleman yield on that point?

Mr. MARKEY. I would be glad to yield.

Mr. LUNGREN. As I recall, when we were coming up—

Ms. JACKSON LEE. The gentleman from California is recognized for an additional 2 minutes.

Mr. MARKEY. Oh, I am sorry. Through the indulgence of the Chair, I would be glad to.

Mr. LUNGREN. When we were negotiating this last year, it was not the administration that asked for the removal of that portion of the sector, but it was the Senate that insisted upon it, I would just tell the gentleman. So when we were working on it on the House side we did not have that exception. For some reason, the Senate thought it was important. Just so the record would reflect, I do not recall the administration's pushing that on us when we negotiated it last year.

I thank the gentleman for yielding.

Mr. MARKEY. I thank the gentleman.

I guess what I would wish here, now that we are in Democratic control in the House and in the Senate, is, if the Secretary does want this law changed and does want the power, that we are ready, willing and able to now do it for the Secretary. But we have to hear from the Secretary that he wants to be able now to have the responsibility for making sure that we do not have a chlorine cylinder explode in a way that causes a catastrophic event in this country.

So if you could take that back to the Secretary.

Colonel STEPHAN. Mr. Markey, I would be happy to deliver the message. Thank you.

Mr. MARKEY. I thank you.

Ms. JACKSON LEE. If the gentleman would just yield on his point, we are here today listening to industry as well on the impact of these regulations. I have indicated that I remain open but concerned about any lists that are going to be altered with the removal of chemicals versus addition in as much as each chemical's, if you will, quantity has some possibility of creating a value for terrorists. I think what you are saying is of the question regarding chlorine, but there are many others that are seemingly being asked to be moved off the list. I hope the Secretary takes my concern back about moving lists and taking different chemicals off of lists, and I know I have raised the question about universities.

We are going to move to the second panel, so we will have to continue this with you as this committee proceeds in the review of these chemical regulations. Let me thank you for your testimony.

Mr. MARKEY. Madam Chair, I thank you for your indulgence.

Ms. JACKSON LEE. Thank you for your indulgence on having you yield on your time. Thank you very much.

I thank the witness for his cooperation, for his wisdom in his statement, and we will look forward to working with you on the questions that have been raised by the members of this committee.

Colonel STEPHAN. Thank you very much for your continued leadership and support of our programs.

Ms. JACKSON LEE. Thank you, Colonel, very much.

We are now ready for the second panel.

Ms. JACKSON LEE. Okay. I thank the second panel again for your patience. And welcome this committee. We believe your testimony will be very instructive for a committee that has vast responsibilities on the Nation's critical infrastructure.

At this time, we would like to welcome the second panel of witnesses. Our first witness will be Mr. Phillip J. Crowley, Senior Fellow and Director of Homeland Security. During the Clinton administration, Mr. Crowley was Special Assistant to the President of the

United States for National Security Affairs, serving as Senior Director of Public Affairs for the National Security Council. Prior to that, he was Principal Deputy Assistant Secretary of Defense for Public Affairs. In all, Crowley, was a spokesperson for the United States Government, the United States military for 28 years, 11 of those years at the Pentagon and 3 at the White House. Welcome, Mr. Crowley.

Our second witness is Mr. Timothy Scott. Mr. Scott is Chief Security Officer and Global Director, Emergency Services and Security for Dow. In this capacity, Mr. Scott is responsible for security crisis management and emergency planning, preparation and response for on—and off-site emergencies involving Dow or Dow products.

Mr. Scott, we welcome you, and we thank you very much for your presence here today. Our third witness is Mr. John Alexander, with the United Steelworkers Health, Safety and Environment Department. He is here to give us frontline perspective on chemical security.

And we welcome you, Mr. Alexander.

Our final witness of the panel is Dr. Ara Tahmassian. Dr. Tahmassian is representing the higher education organizations and is the Associate Vice President for Research Compliance at the Boston University and Boston Medical Center, where he has responsibility for all nonfinancial research compliance issues. He has responsibility for preparation and implementation of integration strategies for multiple regulatory compliance programs at Charles River Campus, Boston University Medical Campus, and Boston Medical Center, as well as development of new programs, as well as being involved in developing new programs required by the research enterprise.

Welcome again to you, Doctor, and thank you for your presence here today.

Without objection, the witnesses' full statements will be inserted in the record, and I will ask each witness to summarize his statement for 5 minutes, beginning with Mr. Crowley.

**STATEMENT OF PHILIP J. CROWLEY, SENIOR FELLOW AND  
DIRECTOR OF HOMELAND SECURITY, CENTER FOR  
AMERICAN PROGRESS**

Mr. CROWLEY. Madam Chairwoman, thank you very much. I now direct the Homeland Security Program at the Center for American Progress, and I am grateful for the opportunity to reflect on the emerging direction of chemical security regulation. And I commend the committee for coming back to this issue early in this process. More has been done in the last 10 months than the previous 5 years, a sign that we now recognize, if belatedly, that chemical security is our most significant infrastructure-related homeland security vulnerability. A new framework is a reasonable start, but more can be done, as the prior panel had discussed.

The threat is real, not hypothetical. The conclusions of the National Intelligence Estimate released last week are sobering. Iraq has become a deadly laboratory, and we have seen several attacks where al-Qa'ida has used chlorine gas tanker trucks as makeshift weapons. If it is happening there, it can happen here. Our vulner-

ability is clear. The previous emphasis on voluntary steps did not work. While some may have made security investments, there remain today too many open gates, accessible storage containers and unguarded rail sidings.

A HAZMAT car moving through a major population center provides everything an urban terrorist would want, a weapon, delivery system and target all in one place. A successful attack would produce loss of life and injury that would dwarf what occurred on 9/11. First of all, I support what appears to be a very ambitious Top-Screen process by DHS. Sound judgments require as much information and as broad a perspective as possible. The mere fact that DHS will evaluate a wide range of chemical manufacturers and users should serve as an important catalyst for change. The last thing we should do is narrow its potential impact.

At a recent conference, a senior executive of a Fortune 500 company suggested that while security was important to his corporate leadership today, he could not guarantee it would remain so. Studies by our Center for American Progress echo this reality. Actions that improve chemical security are feasible and affordable, but the pace of change is inadequate. The real issue is what DHS will do based upon the Top-Screen.

The purpose of government regulation is to broadly impact both perception and behavior to further a common good. The near-term objective should be to use the interim authority that Congress is granted to achieve the maximum possible impact. One way to do this is for DHS to take a system-wide approach to chemical security, as we do for maritime security. DHS should assess risk along with a facility's supply chain, not just what occurs inside its fence line. The highest point of risk may be a HAZMAT car on a freight line that runs through a major city like Washington, D.C., not far from where we are seated. DHS oversight can create a dynamic that brings the chemical and rail industries together to figure out how not just to manage risk but actually reduce it.

Third, we must ensure that DHS has the capacity to properly implement this new authority. In a conference call in April, DHS officials acknowledged that implementation would be handled by a staff of 33 people at headquarters and the 40 field representatives that Secretary Stephan mentioned in his testimony, despite the fact that the DHS Top-Screen could involve tens of thousands of chemical facilities.

Recall that the Coast Guard, one of the largest entities within the Department, struggled with implementation of the Maritime Transportation Security Act, even when employing its Coast Guard Auxiliary to help review port facility security plans. An industry of third-party auditors can help with enactment compliance and enforcement, but DHS cannot watch from the sidelines. It must be in the game and directly engaged.

Fourth, DHS should set an aggressive implementation timeline. You must keep in mind that DHS will be undergoing its first Presidential transition in late 2008. Congress should request a report, including lessons learned and recommendations for permanent legislation from the current DHS leadership by the fall of next year to ensure continuity.

Finally, Congress should pass legislation not later than early 2009 that establishes a permanent regulatory framework. A good model is the comprehensive cross-jurisdictional approach that the House followed with legislation implementing the 9/11 Commission's recommendations. This legislation should broaden DHS's authority, in concert with the EPA, to regulate drinking water and water treatment facilities, which are now exempted, which would combine physical security and transportation policies into a comprehensive strategy that should establish material or process substitution as a key component of a successful security program.

The legislation should make clear that Federal regulation is a floor, not a ceiling. There is simply no reason that the Federal Government should preempt States from taking additional measures that can make specific sites even more secure. I thank the Chairwoman, and I look forward to your questions.

[The statement of Mr. Crowley follows:]

PREPARED STATEMENT OF PHILIP J. CROWLEY

I am P.J. Crowley. I direct the homeland security program at the Center for American Progress. I am grateful for the opportunity to reflect on the emerging direction of chemical security regulation and its impact on both the public and private sector.

More has been done on this issue in the past 10 months than the previous five years. This is clearly a sign that we now recognize, if belatedly, that chemical security is our most significant infrastructure-related homeland security vulnerability. The framework that is emerging is a reasonable start, but more needs to be done, particularly the need to move as rapidly as possible from an interim chemical security regulatory framework to a permanent program with broader authorities and incentives.

The Department of Homeland Security embraces, and I believe properly so, a risk-based approach. The elements of risk, of course, include threat, 'vulnerability and consequence. Each element conveys the urgency that we must proceed aggressively and we must do it right.

The threat is real, not hypothetical. The conclusions of the National Intelligence Estimate released last week are sobering. Iraq has become a dangerous laboratory and various technologies and tactics have migrated via veterans of the jihad and the Internet to other fronts. In recent months, we have seen several attacks in Iraq where presumed al-Qa'ida operatives have used tanker trucks filled with chlorine gas as makeshift weapons. If it is happening there, it can happen here. We also see from the most recent plots in London and Glasgow that individuals will use ingredients they have at hand against familiar targets that can create both immediate destruction as well as broader economic ripple effects.

Our vulnerability is clear. The previous emphasis on voluntary steps did not work. Chemical manufacturers, transporters and users were either unable or unwilling to take voluntary steps on a consistent basis to improve security across the varied landscape of the chemical industry. Some made investments in improved security, but as a number of investigative reports have shown, almost six years after 9/11, there are still too many open gates, unsecured rail sidings and accessible storage containers. A HAZMAT rail car moving through a major population center provides everything an urban terrorist could want—a weapon, a delivery system and a target—all in one place.

The potential consequences of an attack employing acutely hazardous materials are well-known and have been for a long time. If successfully attacked, the expected injuries and loss of life would dwarf what occurred on 9/11. The generic chlorine tank explosion that DHS envisioned in its 2004 planning scenarios involved 17,500 fatalities, 10,000 severe injuries and 100,000 hospitalizations. The EPA's Risk Management Program or RMP data identifies more than 500 facilities that, if attacked, place at least 100,000 people at risk and almost 7,000 facilities that put at least 1,000 people at risk.

This is the security environment within which we can evaluate what is being done now and where we must go from here.

I want to concentrate my testimony in five areas—the scope of the "top-screen" that DHS is employing in its facility evaluation; the need for DHS in its risk anal-

ysis to link chemical facility physical security and rail security as part of a comprehensive threat picture; the overall capacity of DHS to successfully execute its new chemical security authorities; setting an aggressive timeline for implementation of interim chemical security regulations, including lessons learned and gap analysis; and, finally, using this early experience as a springboard to enact a permanent chemical security legislation over the next 12–18 months.

First of all, I support what appears to be a very ambitious top screen process by DHS. The initial effectiveness of the new regulatory framework will depend upon decisions DHS makes based on the top screen. The top screen does involve a lengthy and detailed questionnaire, but informed judgments require as much information and as broad a perspective as possible. The mere fact that DHS will evaluate a wide range of chemical manufacturers and users should serve as an important catalyst for action. The last thing we should do is narrow its impact.

We continue to confront a “business as usual” mindset—that the threat is overstated, that doing what is easy is sufficient, that what we do to improve safety will work for security, that security can be cost-free. Our national security no longer depends just on what the military achieves “over there.” It also depends on individual business judgments made here as well. At a conference a couple of weeks ago, a senior executive of a Fortune 500 company suggested that, while security was important to his corporate leadership today, he could not guarantee that security would remain so tomorrow. This corporate attitude must change. Good security is good business.

At the Center for American Progress, we have produced two research papers on chemical facilities and supply chains. We have documented how some companies in different segments of the chemical industry are gradually adapting their operations. Changes, including the adoption of safer and more secure chemicals and processes, can be achieved at a manageable cost. There is ample evidence from our analysis that such changes can improve industrial efficiency and reduce regulatory and associated costs. However, the results also show that change is not occurring fast enough.<sup>1</sup> The private sector must be prepared to do more.

Second, the real issue is not whether DHS should require a top screen of thousands of entities, but what it will do with the information it gathers during the top screen. The purpose of government regulation is to broadly impact both perception and behavior in order to further a common good. The near-term objective should be to use the limited interim authority that Congress has granted to achieve the maximum possible impact. Federal regulation can promote both improved security and, of importance to the corporate world, can also create a level playing field where everyone in the market must meet specific performance standards.

One way for DHS to use its authority to maximum effect is to take a system-wide approach to chemical security. The focus must be not only physical plant security, but supply chain security as well. We follow such a comprehensive approach with maritime security—a fully integrated focus from the point of manufacture, through foreign ports, onto container ships and then through our domestic ports here in the United States.

However, for various reasons, including jurisdictional issues here in Congress, chemical security and rail security are treated as distinct rather than interrelated challenges. For example, a chemical manufacturer and user in remote areas can improve physical security—gates, guards, lighting, access and storage. A rail operator can closely monitor interchanges and rail yards. But unless DHS establishes a comprehensive threat picture, it may not adequately address a facility’s highest point of risk, which could be a HAZMAT car transporting a toxic-by-inhalation or TIH gas such as anhydrous ammonia, chlorine, sulfur dioxide or hydrogen fluoride on a freight line that moves through a major population center like Washington, D.C.

In fact, while CSX has voluntarily discontinued TIH shipments on one of its lines through the District, there are still such shipments on a second line through Eckington Yards, within two miles of the Capitol. The Capitol was a target on 9/11 and could be again. One way to minimize such a terrorist opportunity is through rerouting. A better way would be for DHS to use its assessment process to encourage a shift to more secure alternatives. Thus, DHS should evaluate risk across a facility’s supply chain, not just on what occurs inside a facility’s fence line.

<sup>1</sup>See Paul Orum, Toxic Trains and the Terrorist Threat, How Water Utilities Can Get Chlorine Gas Off the Rails and Out of American Communities, Center for American Progress, April 2007, available at [http://www.americanprogress.org/issues/2007/04/chemical/security\\_report.html](http://www.americanprogress.org/issues/2007/04/chemical/security_report.html). And Paul Orum, Preventing Toxic Terrorism, How Some Chemical Facilities are Removing Danger to American Communities, Center for American Progress, April 2006, available at [http://www.americanprogress.org/issues/2006/04/b681085\\_ct2556757.html](http://www.americanprogress.org/issues/2006/04/b681085_ct2556757.html).



Third, we must ensure that DHS has the capacity to properly implement its new authorities. This is an open question. In a conference call in April, DHS officials acknowledged that implementation would be handled by a staff of 33 people at headquarters and 40 field representatives, despite the fact that DHS anticipated that its top screen could impact several thousand chemical facilities. A few dozen employees will likely not enable DHS to exercise appropriate leadership and oversight. Recall that the Coast Guard, one of the largest entities within the Department, struggled with implementation of the Maritime Transportation Security Act even when it used the Coast Guard Auxiliary to review port facility security plans.

An industry of third-party auditors is expected to help with enactment, compliance and enforcement. Clear lines must be drawn regarding functions that must be performed by government personnel and those that can reasonably be delegated to the private sector. Congress should pay close attention to the resources that are being provided to this function. Even if the primary compliance function is assumed by the private sector, DHS must have sufficient capabilities to do its own independent assessment of facilities that pose significant risks.

In fairness to the private sector, government regulation is supposed to create a process whereby all stakeholders identify risk in light of the threat we face, evaluate a range of solutions and take appropriate actions that can both deter attacks and minimize the impact of any attack that does occur. It is not for the government to dictate solutions, but to encourage action and innovation by those who know the plant or the function best. What the private sector has a right to expect is a full government partner that sets clear standards, is responsive to complex situations that will inevitably arise and creates and maintains a level playing field by enforcing them across the entire sector. DHS cannot watch this unfold from the bleachers. It must be in the game and directly engaged with the private sector, particularly with respect to those facilities in the top security tiers.

Fourth, we have to maintain a sense of urgency about this issue. We are behind. Former EPA Administrator Christine Todd Whitman and former Homeland Security Advisor and later Secretary Ridge were poised to act in 2002 under the new National Strategy for Homeland Security to require roughly 15,000 chemical facilities near major population centers to undertake vulnerability assessments, address those vulnerabilities and report actions taken to the federal government. The White House blocked action. Had appropriate steps been taken then, we would already have a mature and permanent structure in place.

I mention this not as partisan criticism, but to urge that we act aggressively now. DHS should establish an expeditious timeline as to when it expects the facility tiering process to be completed; vulnerability assessments reviewed; security plans validated; and lessons learned evaluated. This is obviously of vital importance since DHS will be undergoing its first presidential transition in late 2008 and there is a need for continuity since it will be the next administration that will be responsible for implementing permanent chemical security rules. I would recommend that DHS provide Congress with a report on interim regulation implementation within the next 15 months, including recommendations for a permanent chemical security framework.

Chemical security should remain a leading priority for Congress over the next two years. Without question, Congress should pass legislation by early 2009 that establishes permanent federal regulation of chemical facilities. A good model is the comprehensive legislation that fully implemented the recommendations of the 9/11 Commission, passed by the House in the first hours of the 110th Congress.

In this legislation, besides making chemical security regulation permanent, Congress should close a gaping hole that exists now and broaden DHS' authority, in concert with the EPA, to regulate drinking water and water treatment facilities, which are now exempted. The legislation should expand the focus of existing efforts beyond simply physical security to include transportation. It should also establish material or process substitution as a key component of a successful security program. Knowledgeable employees should be included in planning. The legislation should make clear that federal chemical security regulation is a floor, not a ceiling. Given the growing threat, there is simply no reason that the federal government should preempt states from taking additional measures that can make specific sites even more secure.

For all stakeholders—the federal and state governments and the chemical and rail industries—given the clear threat, vulnerability and consequence of a chemical attack in this country, the focus should be on how to work collaboratively to do more rather than offering reasons to do less.

I look forward to your questions.

Ms. JACKSON LEE. Okay. Thank you, Mr. Crowley.

Mr. Scott, you are welcomed.

**STATEMENT OF TIMOTHY J. SCOTT, CHIEF SECURITY OFFICER AND GLOBAL DIRECTOR, EMERGENCY SERVICES AND SECURITY, THE DOW CHEMICAL COMPANY**

Mr. SCOTT. Good afternoon, honorable Chairwoman. Thank you for the invitation to address your committee on the critical issue of chemical security. My name is Tim Scott, and I am the Chief Security Officer for Dow Chemical, the world's largest chemical company. I also have a dual role as the site leader for Emergency Services and Security at Dow's site in Freeport, Texas, our largest manufacturing site, and one of the largest in the world.

Dow's products are essential to our Nation's economy and the daily lives of every American. The chemical sector is not only a part of our Nation's critical infrastructure but the foundation for all other sectors.

I have three key points today. First, a comprehensive, uniform and risk-based approach to chemical security is critical. Second, effective partnerships are vital to our Nation's success in meeting this challenge. And third, while there are still some gaps to resolve, the Chemical Facility Anti-terrorism Standards are a significant step forward in securing the chemical sector.

Dow believes the most effective way to address chemical security is through a comprehensive, risk-based approach, and we developed our Integrated Global Security Processes that you see on this poster behind me with just that in mind. Dow has focused on security for years, but over the last 5 years, we conducted two rounds of vulnerability assessments at our sites around the world conducted by teams of security professionals and process safety engineers and involving site employees at all levels at every site. We applied layers of physical security, along with technology and trained people around those critical assets to detect, deter, delay and respond to intruders. We also implement inherently safer approaches when they prove to be an effective solution to change the way our products are manufactured, stored or transported.

We have programs in place to verify the backgrounds of our people working on our sites. We have hotlines for those who work on our sites, as well as the communities around us, to connect immediately with my global organization. And we have an EthicsLine for anyone to report, anonymously if they choose, any concerns, security issues or suspicious situations they may see.

Our integrated approach to security includes securing our supply chain, a responsibility we share with suppliers, carriers, customers and government agencies. While less than 1 percent of what we ship is classified as highly hazardous, we have aggressive programs to further reduce inventories and the amounts we ship. In addition, we require security seals on shipping containers. We use advanced track-and-trace technologies. We work with carriers on routing solutions. We are developing more robust next-generation railcars, and we are strengthening local awareness and response along our transportation routes.

Partnerships on all levels are vital, and we are actively engaging Federal agencies, Congressional committees, and State and local agencies and emergency responders.

In short, Dow Chemical is serious about security. We believe any facility that manufactures, uses or possesses materials in hazardous quantities should be required to implement risk-based security measures. We are encouraged by the new standards and believe they are a significant step forward. We believe States have a critical role to play and may also have unique security issues. And we support the States' rights to address those gaps through a coordinated effort with Federal authorities to ensure that conflict will not occur.

We support the stated purpose of Appendix A and a Top-Screen approach. However, we are encouraged the numbers of facilities potentially covered will be prioritized so that DHS can maintain its intended focus on high-risk facilities. We have concerns that the sunset clause, and the perceived deadlines that it creates, will hamper the ability to implement effective standards. We support DHS's efforts, and ask that adequate time be allowed for effective implementation.

We have made a lot of progress, but more needs to be done. We need a comprehensive, uniform and risk-based approach to protect our Nation's people, communities and critical infrastructure. We need a continued partnership to develop a consistent and efficient approach to this challenge. We need to build on the progress we have already made to be successful in strengthening the security of the chemical sector, and we need this coordinated effort now. We are encouraged by the leadership of your committee and Congress in general, the partnership developed by DHS and the commitment to effective chemical security standards. Thank you.

[The statement of Mr. Scott follows:]

PREPARED STATEMENT OF TIMOTHY J. SCOTT

#### **Introduction**

Chairwoman Jackson Lee, ranking member Lungren and members of the Subcommittee, my name is Timothy J. Scott, and I am the Chief Security Officer and Global Director of Emergency Services and Security for The Dow Chemical Company—the world's largest chemical and plastics company. In addition to my corporate roles, I am the site leader for Emergency Services and Security at Dow's Texas Operations in Freeport, Texas—our company's largest manufacturing facility and one of the largest petrochemical complexes in the world. I also serve as the vice chairman of the Chemical Sector Coordinating Council (CSCC) working with the Department of Homeland Security (DHS) and a member of the National Maritime Security Advisory Committee for the U.S Coast Guard. Today, I am speaking on behalf of The Dow Chemical Company.

I want to thank Congress for giving DHS the necessary authority to regulate the security of our sector. The Subcommittee should be commended for holding today's hearing on chemical security regulations and their impact on the public and private sector. This is a subject that is of extreme importance to our nation, and I'm pleased to be able to share Dow's experience in security as well as continue to serve as a resource and partner to the federal government on this important issue.

Dow has taken an aggressive leadership role driving voluntary initiatives across the industry and has been a leading proponent for risk-based security regulations for chemical facilities. We are actively engaging in partnerships on security, emergency response and information sharing with federal, state, local and international governments as well as with other private entities and stakeholders.

For Dow, this is a world-wide responsibility every day. In the United States, we have over 21,000 employees at 45 sites. Half of our employees are in the U.S. In total, we are 42,000 employees, neighbors and community leaders from 400 different geographic regions around the world. We have about 200 manufacturing sites in 38 countries that supply more than 3,200 products to customers in 175 nations. The Journal of Commerce has ranked Dow as the nation's 7th largest exporter. Dow's products are essential to every aspect of the daily lives of each and every American,

and the chemical sector as a whole is not only a part of our country's critical infrastructure, but a basic building block for each of the other sectors.

The three key points I would like Subcommittee members to take away from my remarks are:

- (1.) We must take a comprehensive, uniform and risk-based approach to protect the people and communities of our nation as well as our nation's critical infrastructure.
- (2.) Effective protection of critical infrastructure can only be achieved through government-public-private partnerships to ensure our nation's security while maintaining the flow of commerce for a vibrant and growing economy.
- (3.) While long-term authority for DHS to regulate chemical security is still required and some issues remain, the Chemical Facility Anti-terrorism Standards (CFATS) are a significant step forward in ensuring all chemical facilities meet the same risk-based performance standards for security.

#### **An Integrated Approach to Chemical Industry Security**

Our commitment to leadership in safety and security did not start on 9/11. In 1985 Dow formalized its long-standing effort to provide ongoing training, awareness and support to local emergency responders and communities with the implementation of the Community Awareness and Emergency Response (CAER) program. In 1986, TransCAER was created by Dow in partnership with Union Pacific Railroad to help ensure training and awareness to communities and local responders along Dow/Union Pacific transportation routes. Later this year—in a renewal of that partnership—we are launching a TransCAER community training tour that will make 28 stops over 74 days in California, and from Texas to Louisiana to Chicago along Union Pacific rail lines.

In 1988 Dow developed a comprehensive, multi-level global security plan—a plan the company implemented during the first Gulf War and later on 9/11. Shortly after these tragic attacks, Dow helped the American Chemistry Council (ACC) draft the ACC Responsible Care® Security Code of Management Practices—a voluntary initiative by leading chemical manufacturers to set the industry standard for handling security. Through Dow's voluntary global implementation of the Security Code, we permanently heightened our security preparedness by investing hundreds of millions of dollars in risk-based security upgrades since 9/11—not just in the United States, but worldwide—the only company to do so on a global level. Dow's efforts have been approved by the U.S. Coast Guard as meeting the requirements of the Maritime Transportation Security Act ("MTSA") at the 12 U.S. integrated sites; and Dow sites in a dozen countries outside the United States have leveraged their Responsible Care Security Programs to demonstrate compliance with the International Maritime Organization's (IMO) International Ship and Port Facility Security Code.

Last year, Dow formed an Independent Advisory Panel of distinguished experts around the world from disciplines including physical security, manufacturing process safety, transportation and supply chain security, emergency response, and crisis management. This panel, chaired by the Honorable Lee Hamilton, was organized by Dow for an independent review of our efforts and visited Dow sites around the world and received an unprecedented inside look at the way Dow conducts its security business.

#### *Our approach to Chemical Facility and Site Security*

Dow's security program incorporates measures focused to detect, deter, delay and to respond to intrusions at Dow's facilities. Dow's security program includes: intelligence gathering through various private and governmental resources to assess risk, Security Vulnerability Assessments (SVA's) to assess vulnerability based on that risk, security plans to address risk, and appropriate security processes to secure our assets—people, property, proprietary information and cyber systems. Emergency preparedness, response services, and community outreach, are the final pieces to our integrated site security processes—and this integrated approach is embedded across our enterprise—in site and facility security, personnel security, supply chain security, information/cyber security and emergency response. This approach has also led to improved security awareness for our employees and communities as well as integrated response planning within the company and surrounding area.

Dow's vulnerability assessments are conducted by a team of security, process safety, and operations professionals to take a total approach—ensuring all aspects of security and safety are evaluated to identify and reduce vulnerabilities at our facilities. As a result of site vulnerability assessments, we've made physical improvements that are visible (such as fencing, access control, vehicle barricades and increased patrols), some that are more covert such as electronic monitoring, alarms and video surveillance, and we've taken steps to implement inherently safer ap-

proaches—to change the way our products are manufactured, stored or transported to reduce risk.

Employees and others working on Dow sites, as well as the general public in the community around Dow sites are an essential element of our integrated security process—often acting as our first layer of security by reporting suspicious or unusual activity in the community or near the site perimeter. Dow has in place a site-by-site Emergency Services and Security call-in line and dispatch service for employees and contractors, local community call-in numbers and an 800 number for use by these same people or the general public from anywhere in the U.S., a global ethics helpline through which employees and concerned parties can report any observed or suspected violation of law or Dow Policies, as well as security issues or suspicious situations or persons. Callers to the Dow EthicsLine have the option to remain anonymous if they prefer. Both security awareness training and ethics training are conducted for all employees on an annual basis, and drills are required of all Dow plants and sites on a regular basis, with at least 25% of those site drills being based on a security scenario and quarterly drills involving various segments of the community and local responders. To maintain regular open communications each Dow site has active Community Advisory Panels (CAPs) and Employee Communications Advisory Panels (ECAPs) to address community and employee questions and communication needs.

As the partnership with various agencies matured and communication improved, a second round of Dow SVAs and additional upgrades were initiated around the world in 2005. Dow's program also includes an ongoing audit process to ensure the services and systems are maintained, updated and implemented appropriately.

#### *Our Approach to Supply Chain Security*

Securing complex supply chains requires collaboration between manufacturers, transportation service providers, customers and governments. As a manufacturer and shipper, Dow is responsible for providing materials in a safe container that will meet the rigors of transportation. It's the transportation service provider's responsibility to safely and securely move materials from our location to the destination. Finally, government provides the appropriate regulatory environment to help ensure the safe and secure transportation of vital materials. Because of this shared responsibility, it's essential that we partner with everyone across Dow's supply chain as well as government agencies at all levels to evaluate vulnerabilities continuously and ensure that safeguards are in place.

Dow also has developed a comprehensive risk management system to ensure the safe and secure distribution of its raw materials, intermediates and products worldwide. Dow has implemented a comprehensive process for conducting reviews, audits and assessments of Dow and supply chain partner operations. Our Distribution Risk Review process also dates back to pre-9/11 times.

We have implemented a number of programs to reduce inventories and the amount of high hazard material we have to ship, we require security seals on shipping containers, and have programs in place to ensure background checks for transportation workers.

#### *Our Approach to Cybersecurity*

Dow has developed a company-wide cybersecurity management plan that includes incident management and business continuity, completed a comprehensive cyber security risk analysis based on the ISO information security standard (ISO/IEC17799), and integrated cyber and information security into our site vulnerability assessments.

Dow fully recognizes that cyber security is an integral part of overall security, and has helped integrate cybersecurity into chemical sector security programs such as the Responsible Care Security Code. In addition, Dow helped form the Chemical Sector Cyber Security Program to establish management practices and guidance to support overall chemical industry cybersecurity. Dow is committed to information security as an integrated approach to security.

#### **Effective Government-Public-Private Partnerships**

Dow has always embraced the partnership approach with DHS and many other governmental agencies. On the security front we work closely with almost every federal agency that has some homeland security role, including the Department of Transportation, Transportation Security Administration, Food and Drug Administration, Federal Bureau of Investigations, Federal Emergency Management Agency, Environmental Protection Agency, as well as state and local agencies and emergency responders. We strongly believe that coordination on all levels between public and private sectors is vital to protect critical infrastructure and effectively implement risk-based security programs.

Dow has worked closely with U.S. Sandia National Laboratories to refine the security vulnerability assessment methodology we use today for our internal security vulnerability assessments and have piloted DHS's RAMCAP risk assessment methodology. Dow will continue to provide information and expertise—directly, and through the various industry associations or the Chemical Sector Coordinating Council.

Dow is working closely with our supply chain partners—the Federal Railroad Administration, Transport Canada, Union Pacific Railroad and Union Tank Car—in developing the Next Generation Rail Tank Car that takes into account new security scenarios, improving safety performance, and utilizing track-and-trace technology. The U.S. Senate recently appropriated an additional \$3 million in fiscal year 2008 for the FRA to conduct additional baseline testing of existing rail tank cars and the evaluation of an advanced tank car design and a prototype of a safer rail tank car.

Dow was one of the first chemical companies to work with U.S. Customs and Border Protection (CBP) to implement their Customs-Trade Partnership Against Terrorism (C-TPAT) security initiative. C-TPAT is a joint government-business initiative to strengthen overall supply chain and border security. Dow has been awarded the highest level of recognition and approval in the program. Only a fraction of all companies that have applied for membership in the C-TPAT program have achieved this premier (Tier Three) status.

#### **The Chemical Facility Anti-terrorism Standards (CFATS)**

Dow has continually advocated for uniform, national, risk-based performance standards for chemical facility security—allowing the chemical facility to reduce the vulnerability by using the appropriate combination of tools for that site including physical security upgrades that could include one or more options such as additional deterrence and delay mechanisms, safety devices, stronger containment, impenetrable seals and well trained personnel; or to utilize inherently safer approaches through process improvements such as by reducing quantities in process or inventory, changing to safer materials and improving process designs.

Compliance with the new Chemical Facility Anti-terrorism Standards requires a great commitment of resources by the regulated community. However, Dow, to a great extent, has already assumed the burden and costs of security at its chemical facilities as part of its corporate responsibility. As a leader in chemical facility safety and security, Dow believes national standards enforced by DHS are necessary to elevate the security preparedness of all high risk chemical facilities in the U.S., regardless of the operator. We believe anyone or any facility that manufacturers, uses or possesses materials in hazardous quantities should be required to implement risk-based security measures.

Clear, strong, and consistent performance standards (as Congress has mandated for commercial aviation, nuclear power, or maritime commerce) must be applied uniformly to all facilities nationwide to ensure effective national security and oversight. Consistency is critical to our country's success in addressing the security of the chemical industry and our nation's critical infrastructure in general. Consistent risk-based performance-based regulations, standards and guidelines; consistent planning, integration and implementation of those plans from top to bottom, from the National Infrastructure Protection Plan (NIPP) to the state and local response organizations to the chemical industry site response team—bringing all the resources and plans together under an integrated incident management system.

DHS must work with all levels of federal, state, and local government to ensure that the performance goals are met, but without creating conflicting and competing programs on how a facility much achieve those goals. States have a critical role to play in protection of the homeland and we coordinate every day with state and local governments on emergency preparations, response, and environment health and safety.

Dow is also cognizant that states and localities may have unique security issues that may need to be addressed through State Law. For instance, because of geographical location or population density, a state may wish to add an additional risk-based performance standard that supplements, but does not conflict with, the DHS regulation. To ensure the national standard provided by Section 550 and the proposed rule will not be frustrated and that conflict will not occur, Dow believes that a coordinated effort between federal and state authorities is necessary, before such supplementary State Law is enacted.

Dow continues to support the Rule's underlying premise of establishing risk-based performance standards for the security of high-risk chemical facilities. Dow also supports the stated purpose of Appendix A and the Topscreen approach—to be sufficiently inclusive of chemicals and quantities that might present a high level of risk without being overly inclusive and therefore capturing facilities which are unlikely

to present a high level of risk. However, Dow is concerned that given the broad and expansive nature of the draft Appendix A list, thousands of relatively low risk facilities could be swept up by the Rule, thereby diluting DHS' resources and enforcement capacity and defeating the intended focus on "high risk" chemical facilities. DHS has indicated that it is working to revise this list to incorporate comments and feedback from the rulemaking process. It is our hope that the Department will address these specific concerns.

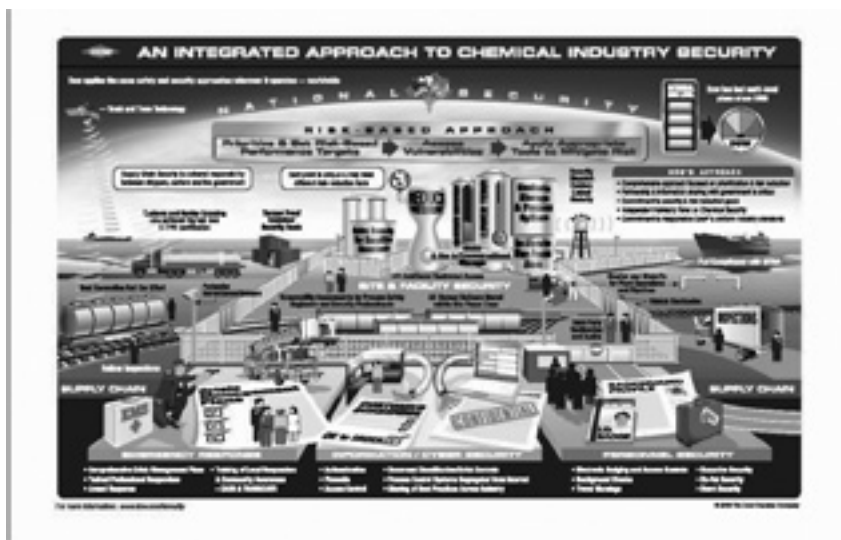
Finally, Dow has concerns regarding the impact of the sunset clause on DHS's authority to fully implement CFATS. For too long, Dow and other industry leaders have made significant voluntary investments to improve security and we've done a good job on our own. These new regulations go a long way in standardizing security requirements and ensuring that high risk chemical facilities have taken the necessary steps to evaluate risk and address vulnerabilities.

### Conclusion

In closing, only through a comprehensive, uniform and risk-based approach can we protect the people and communities of our nation as well as our nation's critical chemical infrastructure. We are encouraged by the leadership of Congress and the continued partnership environment and drive to implement CFATS by DHS. We believe it is long overdue.

Thank you and I'd be happy to answer any questions.

### ATTACHMENT A



For more information: [www.dow.com/security](http://www.dow.com/security)

### ATTACHMENT B

#### *History of The Dow Chemical Company's Leadership in Chemical Security*

##### **1985**

The Dow Chemical Company implements CAER (Community Awareness & Emergency Response)—formalizing the company's long-standing efforts to provide ongoing training, awareness and support to local emergency responders and communities.

##### **1986**

Dow forms TransCAER with Union Pacific Railroad program to assist communities on shipment routes.

##### **1988**

Dow establishes multi-level contingency plans and integrates into corporate crisis management plans (plans implemented following 9/11).

**2000**

Dow recommits to its participation in the U.S. Coast Guard's Chemical Transportation Advisory Committee (CTAC).

**Following 9/11**

Under Dow leadership, American Chemistry Council rolls out Responsible Care® Security Code.

- Dow commences global assessment of its manufacturing facilities and supply chain operations going beyond security code and applying it to all facilities world-wide.
- Dow partners with Association of American Railroads & Class 1 railroads to evaluate vulnerabilities and define security measures (Railroad Security Management Plan).
- Under Dow leadership, an industry team develops best practice guidelines for transporting hazardous chemicals. Chlorine Institute adopts guidelines as mandatory for all members.

**2002**

- Dow senior leader Kathleen Bader is named by President to U.S. Homeland Security Advisory Council.
- Dow Distribution Risk Review Process is significantly upgraded to include potential terrorism scenarios and enhanced security countermeasures.
- Under Dow's direction, The Chemical Sector Cybersecurity Program is established to coordinate sector's activity and align with U.S. Government's National Strategy to Secure Cyberspace.

• **2002—2005**

- Dow joins U.S. Customs & Border Protection's C-TPAT (Customs Trade Partnership Against Terrorism) program and is first chemical company to achieve highest level of recognition.
- Dow joins Canada Partners in Protection program.

• **2002—2003**

- Dow assists in development and pilot program for U.S. Government's Sandia National Labs Risk Assessment Methodology. Dow collaborates with Sandia Labs on transportation security issues.
- Dow leaders advise in development of Center for Process Safety's Alternate Risk Assessment Methodology (CCPS SVA) used by majority of Industry.

**2003—2004**

- Dow sites participate in U.S. Department of Transportation's National Hazmat Truck Safety & Security Operational Test & Delphi Panel to evaluate security technologies for highway shipment.
- Dow participates in Strategic Council on Security Technology's Smart & Secure Tradelanes (SST) Initiative to evaluate use of new technologies to improve end-to-end supply chain security for international cargo shipments.
- Dow Chief Security Officer Tim Scott is named by DHS Secretary to National Maritime Security Advisory Council.
- Dow senior leader David Kepler joins U.S. Chamber of Commerce Homeland Security Task Force.
- Dow makes first public statement calling for U.S. national legislation to regulate all chemical facilities;  
*Dow continues to press for uniform, national risk-based standards to this date.*
- Dow leads group of industry CEOs to conduct sector wide assessment of chemical industry cyber vulnerabilities.

Dow sites in 12 countries outside U.S. leverage Responsible Care® Security Programs to demonstrate compliance with International Maritime Organization's (IMO) International Ship & Port Facility Security Code.

**2004**

- Dow leadership drives incorporation of security considerations into Chemical Distribution Institute (CDI), ACC's Responsible Carrier Program & Global Safety & Quality Assessment System (SQAS) of European Chemical Industry Council (CEFIC) for evaluation and qualification of logistics service providers.

**2004—2005**

- Dow leader Tim Overton serves on Chemical Sector RAMCAP Committee to help drive development of DHS's Chemical sector version of its new risk assessment methodology.
- Under Dow leadership, DHS is urged to include Cybersecurity criteria as component in RAMCAP.



**2005**

- Dow leader Tim Overton represents chemical sector on American Society of Manufacturing Engineers RAMCAP Standards Committee.
- Dow unilaterally requires high-security seals on all cargo containers worldwide.
- Dow completes first round of Site Vulnerability Assessments & Upgrades and commences a second round.
- Dow leadership in Brazil drives adoption of Responsible Care® Security Code & Transportation Guidelines by national chemical industry association (ABIQUIM).
- Dow senior leader David Kepler appears before U.S. House Committee on Science calling for government focus on significant threats to our national telecommunications infrastructure and high-risk cyber threats.
- Dow conducts comprehensive, multi-disciplinary effort internally to evaluate security needs and challenges in China and other emerging markets.
- Dow participates in Legal Obstacles Subgroup of the Information Sharing Task Force of the Homeland Security Advisory Council.

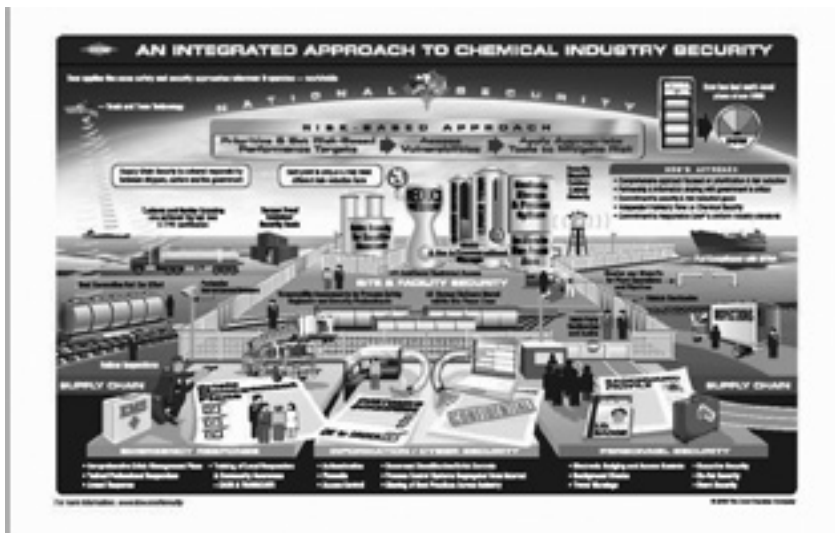
Under Dow leadership, Industry works closely with U.S. Government's Idaho National Labs to develop Cybersecurity Awareness Program for Industrial Control Systems.

**2005—2006**

- Dow AgroSciences implement life-cycle cylinder tracking program using combination of technologies including RFID and GPS to improve security of 60,000 cylinders.
- Dow leadership drives complete update and revision of Chemical Industry text book on transportation risk management.
- Dow assists in the development of the Chemical Sector Specific Plan under National Infrastructure Protection Plan.

**2006**

- Dow leader Tim Overton serves on DHS/Oakridge National Labs Committee to develop Screening Criteria to be used for DHS in implementation of RAMCAP program for Chemical Facilities.
- Dow Chief Security Officer Tim Scott participates with DHS Secretary Chertoff in first National Security Forum on Chemical Security calling for national regulation of chemical facility security.
- Dow forms unprecedented Independent Advisory Panel on Chemical Security.
- Dow announces Next Generation Rail Tank Car, a joint project with Union Pacific and Union Tank Car to provide a step change in safety and security performance.
- Dow reaches out to fellow chlorine producers to establish Chlorine Rail Tank Car Development Coordination Panel; participating companies must commit to replacing chlorine fleets with tank cars with improved safety and security attributes by 2017.
- Dow launches project to put GPS tracking and condition monitoring sensors on all chlorine rail tank cars by 2007 and other highly hazardous materials by 2008.
- Dow announces commitment to reduce shipment of highly hazardous materials by 50% by 2015 and a renewed commitment to TRANSCAER over next 5 years to touch every community with public awareness and emergency responder training where highly hazardous materials move.
- Dow senior leader Gary Veurink addresses Center for Chemical Process Safety to reiterate Dow's call for national Chemical Security legislation.
- Dow makes global site security vulnerability/risk reduction commitments for manufacturing sites to be reached by 2010.
- Dow is honored with U.S. Maritime Security Conference award for Maritime & Supply Chain Security.
- Dow Chief Security Officer Tim Scott is selected as Vice-Chairman of Chemical Sector Coordinating
- Council to coordinate security efforts across the industry with DHS.
- Stanford University Study recognizes Dow as one of ten "Innovators in Supply Chain Security."
- Dow Chief Security Officer Tim Scott is named one of "25 Most Influential Security Executives" by Security Magazine.



Ms. JACKSON LEE. Thank you, Mr. Scott.  
Mr. Alexander.

**STATEMENT OF JOHN ALEXANDER, HEALTH AND SAFETY  
SPECIALIST, HEALTH SAFETY AND ENVIRONMENT  
DEPARTMENT, UNITED STEELWORKERS**

Mr. ALEXANDER. I would like to thank Chairwoman Jackson Lee and the committee for allowing the United Steelworkers to share their concerns about the chemical security regulations.

The first item that I wanted to bring up was worker involvement. The current proposals do not provide for involvement by workers or their labor representatives, in contrast with other similar regulations also aimed at public safety. We believe that such involvement is essential to chemical plant security. Anyone who has worked in a chemical plant knows that the workers know better than anyone where the weaknesses are and what needs to be addressed in order to make a facility safer. And not to, in this particular piece of legislation or regulation, not to include the workers we believe is a very big mistake. If you check just some of the other regulations that already exist, for the most part they do have clauses in there that require worker participation in addressing those problems.

The Top-Screen process, we made some recommendations in the first round that they have a list of chemicals in order to figure out how they were going to use the Top-Screen process. And we are glad to see that the Department of Homeland Security adopted that type of a process in order to make the determination who would have to complete it. But by the same token, now that we look at the list, we have over a hundred chemicals that, if you have any amount whatsoever, will require Top-Screen process. And we have to question how much of a strain that is going to put on the Department of Homeland Security for facilities that have those chemicals, some of those chemicals that will serve as no risk whatsoever.

And at the same time, we have chlorine listed at 7,500 pounds. Anything under 7,500 pounds will not have to complete a Top-Screen process. And we have to just question where and how they came up with some of the lists of the chemicals.

The risk assessment and risk-based tiering, we are wondering why we have to have four different tiers. In the regulations, it reads what the highest-risk process, what would have to be required that those companies complete. And if you read that list, there is nothing in that list that the lowest-tier facility should not be doing. So we don't understand why you need so many different tiers. Either you got a high risk, a low risk or no risk. And you need to make it pretty simple. Why make it complicated? It is a pretty simple thing. You don't need extra tiers to complicate the issue. And we don't understand why we are going the way we are going. If you have a low risk, you obviously ought to be doing the same thing you are doing in high-risk facilities as far as security and so forth and so on, on the list.

Safer technology, inherently safer technology. We can't understand in any way, shape or form why inherently safer technology is not at least a recommendation, let alone a requirement in these regulations. The easiest and safest way to take a facility that is a high-risk threat to turn it into not a threat would be to use inherently safer technology. So that is not just chemical substitution but also when you change your processes for emergency shutdown. You hit one button, it closes all your valves on the system, so that if there is an attack and if there is a release, you can shut the whole system down almost instantly so that it doesn't turn into a larger, catastrophic event.

Our release systems, probably 20 to 30 percent of the facilities in the Nation, we had a lot of laws passed in the late 1970s and early 1980s that the chemical facilities would have to have their release systems go to a controlled atmosphere rather than the atmosphere, but a lot of the companies chose not to do that because it wasn't feasible; it would cost too much money. That is inherently safer technologies. If you want to reduce the damage that would be done if there was an attack, then you should have release systems going to controlled systems, which you don't.

Background checks. The background checks, I have already just a few months ago, when I was investigating a fatality at a power plant, was refused entry because of the new, quote, what I was told, the new regulations from the Department of Homeland Security that would not allow me entry because I didn't have a background check. I am guaranteed entry by the National Labor Relations Act. And there is nothing in these regulations that protect our guarantees or rights that we already have. And already we are being denied entry into facilities where we are required to conduct investigations when workers are seriously injured or killed.

Access to information, another issue. There is nothing in the regulation that protects our rights to access to information. If you read everything that is written on critical vulnerable information, critical vulnerable information, depending upon whose interpretation of what it is, could include information that we are allowed and permitted to have to protect workers, the community and other folks that might—even the management of the plants, to protect

the people that could be overexposed. And critical vulnerable information can deny us those rights. There should be something written in here that in no way any of our rights that are guaranteed by OSHA, the EPA or any other agency be denied because of the Department of Homeland Security regulations.

There is much more in-depth information in the written testimony that I submitted, and I would hope that everyone on the Committee would take a look at it. And just in summary, what I would like to say, some of the most fundamental protections that one would expect to be identified in the Department of Homeland Security regulations are missing. The involvement of workers and their representatives in all aspects should be there. The use of inherently safer technologies, the ambiguity of terms, the unwarranted background checks and the possible classification of information used to protect workers and the public, and the lack of the government accountability on all those issues beg to be addressed.

One last thing on the background checks. I don't understand what anyone would hope to find on an employee who has been working in the facility for 20 years and conducting a background check that is going to identify them as a terrorist.

[The statement of Mr. Alexander follows:]

#### PREPARED STATEMENT OF JOHN ALEXANDER

Honorable Bennie Thompson and Members of the Committee, the United Steelworkers (USW) appreciates the opportunity to appear before the U.S. House Committee on Homeland Security and the Subcommittee on Transportation Security and Infrastructure Protection. My name is John Alexander; I am a health and safety specialist for the USW's Health, Safety and Environment Department at our international headquarters in Pittsburgh, PA.

The testimony I present today is to examine the Department of Homeland Security's (DHS) chemical security regulations and its effect on the public and private sector.

The full name of our union is the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied-Industrial and Service Workers International Union, AFL-CIO, CLC, but we have a short name more common in use, which is the USW. As the largest industrial union in North America, we represent a total of 850,000 active workers employed all across North America. The USW represents approximately 50,000 workers in chemical plants, oil refineries and other workplaces that produce, use or store significant quantities of highly hazardous chemicals. However, using the DHS definition that specifically applies to chemical facilities, the USW represented workers exceeds the 50,000 figure by tens of thousands.

We have a keen interest in effective standards protecting our members, their families, and the general public. Along with other organizations, we worked hard for effective legislation in the last Congress and we continue that work. The provisions attached to the DHS appropriations bill late last year did not meet all our objectives, but it did provide a useful starting point. Unfortunately, the USW continues to have grave concerns on how some of the issues are being addressed. Some of the current proposals will do little to enhance the security of chemical facilities or the safety of workers and the public. We will summarize our comments below, and deal with each in more detail in a subsequent section.

#### **Comment 1: Worker Involvement**

**Summary**—The current proposals do not provide for involvement by workers or their labor representatives, in contrast with other similar regulations also aimed at public safety. We believe that such involvement is essential to chemical plant security.

The recent Chemical Facility Anti-Terrorism Standards-Proposed Rule lacked requirements for employee and union representative's involvement as does 6 CFR part 27.

For example:

**“The site visits are conducted by DHS protective security professionals, subject-matter experts, and local law enforcement, along with the facility’s owners and operators.” (p. 78278)**

In other rules, such as OSHA’s General Industries Standards (29 CFR 1910), the government encourages employee and employee representatives to be present during their site visits. To not involve some of the most informed employees and representatives is not to utilize one of the best assets to the adoption of a successful program. Workers are in a unique position to identify and prevent potential facility vulnerabilities. They understand just where an intruder might enter a plant; whether or not security guards are doing their job; the location of volatile materials; whether the facility is sufficiently staffed with trained personnel; if backup control systems properly operate; as well as other potential risks. Because of their concerns about workplace safety and health, they routinely point out hazards to management. Workers also are often required to respond during emergencies, and in doing so, function as both the first and last line of defense against a disaster. Workers and their unions can be vital participants in plant safety and security. To be fully effective, worker participation must be supported by strong whistleblower protection.

Although the appropriations legislation authorizing the rule is silent on this subject, it certainly does not bar worker and union involvement. DHS could and should take guidance from the history of the legislation. The bills that emerged from the committees of jurisdiction in the House and Senate (H.R.5695 and S.2145) both contained worker participation and whistleblower protections. Other jurisdictions have also dealt with this issue. The State of New Jersey’s Toxic Catastrophe Prevention Act, (*N.J.S.A. 13:1K-19 et seq.*) and New Jersey Department of Environmental Protection Administrative Order 2005-05 establishes procedures for participation by employees and their representatives. Any DHS legislation should include a requirement for worker and union involvement in all facets of the operations including the security plans, top screen process, safe operations and emergency shutdowns.

#### **Comment 2: Top Screen Process**

**Summary—Top Screen Process required by facilities containing certain amounts of chemicals is out of line. High level of Risk is not properly defined. Leaving the definition to the discretion of anyone or any agency with no specified parameters leaves open the possibility of misinterpretation of the Department’s intent, and could create difficulties and inconsistencies in application of the rule.**

The Top Screen process is a process that will provide information to the DHS in order to make the determination at what level of security risk the facility will be designated.

T2“A fundamental question posed by Section 550 is which facilities it covers. Section 550 specifies that the provision “shall apply to the chemical facilities that, in the discretion of the Secretary, present high levels of security risk.” . . .”

In 6 CFR part 27 Appendix A, a list determining the amounts of chemicals located at a facility will determine whether the facility will be required to perform a Top Screen.

More than a hundred of those chemicals are listed at any amount of possession. We believe many of these chemicals are listed at unreasonably low amounts. Having many of these chemicals on site at such low amounts would in no way place a site at a high risk level. By requiring all of such facilities to perform a Top Screen would present two major problems. First, it is inappropriate to require a facility to perform a Top Screen just because it has any amount of some of the chemicals listed. This will place an unjust burden on facilities that would never be considered a target. Secondly, the inordinate number of facilities that would be sending their Top Screen to the DHS would over-burden the department requiring them to address and reply to those facilities informing them that they are at the no risk tier of the tiering system. The DHS could well better spend their time ensuring that High Risk Level facilities are addressing their security issues.

The problem presented with the determination of High Risk Level is that it is up to the DHS to make that decision. Better parameters or a specific definition would better serve the DHS.

The absence of a definition also leaves no room to discuss what the parameters for inclusion should be. It is all up to the Secretary. In addition, the proposal seems to invite the Secretary to determine coverage on a case-by-case basis, creating long delays in implementation.

#### **Comment 3: Risk Assessment and Risk Based Tiering**

**Summary—Risk Based Tiering should be kept simple. The three categories should be: High Risk, Low Risk, and No Risk. To do otherwise is to create confusion where it is not needed.**

The proposal states:

**“As a practical matter, the Department must utilize an appropriate process to determine which facilities present sufficient risk to be regulated.” (p. 78281)**

But then:

**“The Department may draw on many sources of available information. . .”**  
**“The Department may also seek and analyze. . .”** **“The Department proposes to employ a risk assessment methodology system very similar to this RAMCAP Top-screen process. . .”**

**“The proposed regulation would permit the Department to implement this type of Top-screen risk analysis process to screen facilities.”**

What type? DHS “may”, “may also”, “very similar to,” does not define what their method will be. The only description the Department offers is that **“the department has worked with the American Society of Mechanical Engineers (ASME) and others to design a RAMCAP “Top Screen” process. . .”** There is no comprehensive explanation of what the method will be. This is especially troubling given the fact that: **“As noted, the statute gives the Secretary unreviewable discretion to make this determination.”**

No one, not even the Department, seems to know what method will be used. But, the Department claims to have unreviewable discretion in implementing the method. The Department should define what the method entails so that constructive comments can be made on whether or not the method should be refined. How can one comment on that which is not described? Who are the others who helped design what the Department may use? Were there workers, workers representatives, Union Health, Safety and Environmental Specialists, other Governmental Specialist, (i.e. OSHA, EPA etc.) consulted?

DHS should first define the method, and then ask for comments. We cannot blindly comment on that which is not explained.

**“The Department believes that the “risk-based performance standards” and the Section 550 Program should indeed incorporate risk-based tiering”. (p. 78283)**

**The Department shall place covered facilities in one of four risk-based tiers, ranging from highest risk facilities in Tier 1 to lowest risk facilities in Tier 4.**

The Department then seeks comment on how to differentiate requirements based on tiering. Later the document proposes that a high risk facility will have different requirements than a lower risk-based tiered facility.

6 CFR Sec. 27.230 now identifies the steps a High Risk facility will be required to perform. None of those listed are items that a Low Risk facility shouldn't perform.

In order not to complicate this issue further, DHS should simply identify the criteria for those facilities that will be regulated or not. If the DHS otherwise insists on having tiers, then the tiers should be limited to high or low risk. It may be futile or even counterproductive to try to determine which facility is more prone to an attack. In fact, a terrorist might choose a lower-tiered facility because it is classified as lower risk, with less stringent security requirements.

An attempt to delineate what items should be performed for four categories is an exercise in futility. That is not to mention a quagmire for the DHS for enforcement and an undue burden on the facilities.

#### **Comment 4: Safer Technology**

**Summary**—Safer Technology, there is no requirement or suggestion to apply inherently safer technology and or changes to the process to lower the risk of a facility. This lack is perhaps the greatest defect in the regulation.

The proposal never addresses the use of inherently safer technology. Such a provision was not required by the legislation, but neither is it barred. Safer processes may not be feasible in some circumstances, but they should at least be considered in any security plan. Many safety measures may be possible without expensive redesign or new equipment. Safer fuels or process solvents can be substituted for more dangerous ones. The storage of highly hazardous chemicals can be reduced. The lack of any requirement even to consider such measures is the greatest failing of the proposal and regulation.

Safer Technologies include but are not limited to changes in the process that would reduce the possibility or likelihood of an attack turning into a major catastrophe. Yet, nowhere in the standard is this even addressed. If in fact, we are attempting to reduce the likelihood of an attack of a chemical facility or the effects thereof, then it is unconscionable that inherently safer technology goes unaddressed in this legislation.

**Comment 5: Other Missing Provisions**

**Summary**—Other missing provisions, the proposal would provide far greater protection by including provisions requiring the employment of sufficient and qualified personnel in order to meet the DHS requirements; strengthening the recordkeeping and reporting requirements for process malfunctions or any attempted terrorist attack; defining the need for emergency response, safe shut down, evacuation and decontamination procedures in case of an attack or malfunction; and effective training requirements for workers in covered facilities.

The proposal lacks many other requirements that would greatly enhance security in chemical facilities, and mitigate releases of highly hazardous chemicals, either through a terrorist attack, or from industrial accidents. A partial list includes: requiring the employment of sufficient and qualified personnel in order to meet the DHS requirements; strengthening the recordkeeping and reporting requirements for process malfunctions or any attempted terrorist attack; defining the need for emergency response, safe shut down, evacuation and decontamination procedures in case of an attack or malfunction; and effective training requirements for workers in covered facilities.

**Comment 6: Background Checks**

**Summary**—Background checks, although there is some justification for background checks for new hires, background checks for current workers are unlikely to identify potential terrorists, and could create opportunities for discrimination.

The DHS proposes:

**“A proposed standard on personnel surety would require covered facilities to “perform appropriate background checks on and ensure appropriate credentials for facility personnel, and as appropriate, for unescorted visitors with access to restricted areas of potentially critical targets” (p. 78286)**

Conducting background checks on current, long-term employees of a high risk facility is unlikely to identify a potential terrorist. However, conducting background checks will open the Pandora’s Box of ways that the gathered information can be misused. Millions of workers’ right to privacy could be violated by such an order in an attempt to identify that which is extremely unlikely. Countless dollars will be spent for that which the DHS claims is necessary, but is not. Significant amounts of time will be spent prosecuting those who will misuse the information gathered in an illegal fashion. Time and money will be spent defending those who will be unjustly treated by information gathered by a background check. Some of this might be justified for new hires, who could potentially seek employment in order to commit a terrorist act. But it is very unlikely that long-term employees will turn out to be terrorists, or that they will be caught by any reasonable background check.

Some of the potential problems with background checks might be avoided by placing strict limits on access to, and the use of personal information required by the rule. That should certainly be done if background checks are required for new hires. However, ensuring that background checks are fair and accurate will require a significant allocation of resources by DHS, with very little return in the case of long-term employees.

In the proposal there is no provision protecting individuals who need occasional access to these facilities from being unjustly delayed by a background check. For example, labor unions have a duty to their members to investigate accidents in the workplace. Prompt access is absolutely essential in order to acquire vital information. Background checks could easily be misused to disallow prompt access. Investigators and or experts in their field do also require prompt access.

On 4-24-07, I was assigned to investigate a fatality of one of our members that took place at a Power Plant. The company refused entry based on the “New DHS regulations”. After hours of discussion, I was able to persuade the company to allow entry. We already are being denied access that is protected by the National Labor Relations Act simply because the DHS refused to address that the DHS regulation would not interfere with rights guaranteed by previous legislation.

These entries are protected by other federal laws which 550 says this rule is not to abridge. The PL109-295 Homeland Security Appropriations Act of 2007 Section 550 (f) states: **“Nothing in this section shall be construed to supersede, amend, alter, or affect any Federal law that regulates the manufacture, distribution in commerce, use, sale other treatment, or disposal of chemical substances or mixtures.”** The DHS should provide language that will guarantee prompt access to labor representatives and others. The language in the proposal could be interpreted to be in conflict of rights guaranteed by the National Labor Relations Act. Provisions should also be provided that describe how the DHS anticipates such inevitable conflicts will be adjudicated.

One solution would be to include requirements for escorting individuals that are called into a facility, such as contractors, to perform a variety of work that has not had background checks.

Later the proposal states:

“...the Department will consider appropriate grounds for denying access or employment to individuals when their background check reveals an anomaly. In a different context, the Department has developed a list of “disqualifying crimes,” as part of a threat assessment process, that prevent individuals from gaining access to certain facilities or privileges. See 46 U.S.C. 70105 (c); 71 FR 29396. . .” (p. 78284)

What type of anomaly is the DHS expecting to find from a background check of a worker that would deny them employment? The DHS doesn’t even bother with a definition of “an anomaly”. Accessing the document referenced, one can identify the listed “disqualifying crimes.” Section (c) Determination of Terrorism Security Risk identifies several of the crimes that would disallow employment or access to covered facilities or critical processes. They are:

(A) If a person “has been convicted within the preceding 7-year period of a felony or not not guilty by reason of insanity of a felony—

(i) that the Secretary believes could cause the individual to be a terrorism security risk to the United States; or

(ii) for causing a severe transportation security incident;

(B) has been released from incarceration within the preceding 5-year period for committing a felony described in subparagraph (A);

(C) may be denied admission to the United States or removed from the United States under the Immigration and Nationality Act (8 U.S.C. 1101 et seq.); or

(D) otherwise poses a terrorism security risk to the United States”. . .

The possibility of using this information to terminate workers is painfully obvious. For example, in Ohio it is a felony to not pay two of the twelve months of the year required child support payments. One would hope that the Secretary would not be inclined to think of this individual as a terrorist. However, if he or she did, the employee could lose their job with no recourse.

Nor has DHS explained what constitutes “causing a severe transportation security incident”? A legal strike or lockout, or a work refusal over a safety issue might be considered by the employer to constitute a “severe transportation security incident.” The DHS needs to define these terms.

These very questions arose in the past with regard to other rules. In some cases they were addressed. The Maritime Transportation Security Act and the HAZMAT CDL allow provisions for workers, who have committed what is considered a disqualifying crime, to be able to demonstrate that they are nonetheless not a security risk. The DHS has offered no such provision in this proposed rule or regulation.

#### **Comment 7: Access to Information**

**Summary**—Access to information, the provisions regarding vulnerability information is overbroad. Workers and the public should have the right to know what risks they face. Guarantees should be included that provide the right to information to workers including site plans that have already been guaranteed by previous legislation.

The DHS states:

“Section 550 (c) of the Homeland Security Appropriations Act of 2007 provides the Department with the authority to protect from inappropriate public disclosure any information developed pursuant to Section 550, “including vulnerability assessments, site security plans, and other security related information, records and documents.” In considering this issue, the Department recognized that there are strong reasons to avoid the unnecessary proliferation of new categories of sensitive but unclassified information, consistent with the President’s Memorandum for the Heads of Executive Departments and Agencies of December 16, 2005, entitled “Guidelines and Requirements 550 (c), however, Congress acknowledged the national security risks posed by releasing information relating to the security and/or vulnerability of high risk chemical facilities to the public generally. For all information generated under the chemical security program established under Section 550, Congress gave the Department broad discretion to employ its expertise in protecting sensitive security and vulnerability information. Accordingly, the Department proposes herein a category of information for certain chemical security information called Chemical-terrorism Security and Vulnerability Information (CVI).” (p. 78288)

If one analyzes this paragraph carefully, it states that DHS has authority to refuse disclosure of certain information. The information includes “any information developed pursuant to Section 550, “including vulnerability assessments, site secu-



rity plans, and other security related information, records and documents". This also includes unclassified information. In summary, any information the Department places in its new category is Chemical-Terrorism Security and Vulnerability Information (CVI). The Department identifies the President's Memorandum and Congress as the source for the authority given to them to refuse the disclosure of CVI.

The next paragraph reiterates this authority by stating:

**"Congress also recognized that, to further the national security interests addressed by Section 550, the Department must be able to vigorously enforce the requirements of Section 550, and that these efforts may include the initiation of proceedings in Federal district court. At the same time, it is essential that any such proceedings not be conducted in such a way as to compromise the Department's ability to safeguard CVI from public disclosure. For this reason, Congress provided that, in the context of litigation, the Department should protect CVI more like Classified National Security Information than like other sensitive Unclassified information. This aspect of Section 550 (c) has no analog in other sensitive unclassified information regimes."**

In other words, DHS concludes they have the authority to treat CVI more like Classified National Security Information.

In the next section, **"Protection from Public Disclosure,"** the proposal states:

**"In setting forth the minimum level of security the Department must provide to CVI, Section 550 (c) refers to 46 U.S.C. 70103, which was enacted by the Maritime Transportation Security Act of 2002: "Notwithstanding any other provision of law and subsection (b), information developed under this section \*\*\* shall be given protections from public disclosure consistent with similar information developed by chemical facilities. . ."**

Later the proposal includes a very broad list of what could be considered CVI:

**"The following information should be reviewed by the VA team as appropriate for determination of applicability as critical assets: chemicals, such as the Clean Air Act 112(r) list of flammable and part 68 or the OSHA Process Safety Management (PSM) 29 CFR 1910.119 list of highly hazardous chemicals; inhalation poisons or other chemicals that may be of interest to adversaries. . ."**

There is no question that some information should be protected from public disclosure. Which tanks contain which chemicals is an example. At the same time, a potential terrorist with knowledge of chemical engineering will almost always be able to determine what chemicals may be on the site taken as a whole. Hiding that information from the public serves no legitimate purpose.

There are good reasons for the public to have access to critical information about nearby chemical facilities. Community residents should have the right to know the risks they face, so they can work to reduce those risks. The information may also be necessary for effective emergency planning, and to protect vulnerable populations.

CVI material should be limited to information generated by the proposed legislation. Any information that has been or can be independently gathered should not be considered CVI. Information such as PSM, EPA's Risk Management, Emergency Planning and Community Right to Know Act including Sections 311, 312, and 313, related records or any other such material need to be clearly defined that they do not and will not fall into the CVI category.

Community, labor and environmental organizations fought for decades for the right to know about the hazardous chemicals that they were and are being exposed to in an effort to protect their very lives. It is estimated that more than 50,000 workers die each year from exposures to hazardous chemicals. To take away the right to know the names and hazards of the chemicals to which they are exposed would deny them the ability to protect themselves and ultimately result in increased illness and death.

Unfortunately, the proposal couples an unacceptably vague definition of CVI with unbridled discretion granted the Secretary. DHS should replace these provisions with language precisely defining the information to be protected, based on a careful weighing of the public's right and need to know against the need to deny sensitive information to a potential terrorist. Those provisions should be subjected to full public notice and comment. Finally, there must be a mechanism to challenge determinations by the Secretary.

6 CFR Sec 27 has not adequately addressed the above concerns. A provision should be added that ensures information designated CVI that has otherwise guaranteed access, shall not over-rule those preceding regulations. In addition, where 6 CFR Sec 27 identifies the inspection process by the DHS Inspector, a requirement should be added to include a designated union representative, designated by the

local President, be present with the company representative during such inspection where a union is present in the company.

#### **Conclusion**

Some of the most fundamental protections that one would expect to be identified in the DHS regulation are missing. The involvement of workers and their representatives in all aspects, the use of inherently safer technology, the ambiguity of terms, the unwarranted background checks, and the possible classification of information used to protect workers and the public, the lack of government accountability, are all issues that beg to be addressed.

In addition, many of these issues and concerns were addressed previously in the Maritime Transportation Security Act (MTSA) and the HAZMAT CDL rule which were written for other groups of workers. Substantial changes and provisions were adopted protecting workers. It would do well for the committee to review all of the Acts or regulations that have been adopted on security and on health and safety more generally.

We all want to protect our country and our citizens. But these regulations take away important rights while ignoring measures that are simultaneously more protective and more compatible with American democracy. If we proceed in the fashion outlined by DHS, the terrorists will have accomplished part of their goal.

Ms. JACKSON LEE. I will pose those questions to you, Mr. Alexander. Your time has expired. Thank you. We will put your statement into the record.

Mr. Tahmassian, thank you for your presence here. We hope that we will be giving some corrected pronunciation to your name. Welcome.

#### **STATEMENT OF ARA TAHMASSIAN, ASSOCIATE VICE PRESIDENT, RESEARCH COMPLIANCE, BOSTON UNIVERSITY**

Mr. TAHMASSIAN. Thank you. I would like to thank you, Madam Chairwoman, and the committee for allowing me the opportunity to appear today. I am here today representing the higher education associations, and over 2,000 colleges and universities as its membership. I am, in real life, an Associate Vice President for Research Compliance at Boston University and Boston Medical Center, where I have a responsibility for research compliance, including safety and security at over 600 labs spread over 25 buildings.

There are three main points that I would like to highlight for you today. First is the commitment that the higher education has to continue to comply with the new chemical standards. Second, I would like to convey to you the concerns of colleges and universities about the standards that were published in April of 2007. And finally, I would like to emphasize that we are encouraged with how the Department of Homeland Security has responded to some of our concerns.

First, I wish to make it clear to the committee that colleges and universities are committed to safe conduct of research and teaching on their campuses. We recognize that all of us, including colleges and universities, must become more vigilant in the post-September 11th world. Universities have for years complied with an evolving set of Federal regulations governing health, safety and security, from OSHA to CDC, the Environmental Protection Agency, Department of Agriculture, and Nuclear Regulatory Commission to name a few. To meet these requirements, our institutions have assessed the risks of chemicals used on campus labs and have adopted appropriate safety measures for the protection of researchers and the environment. We are approaching the Department of Homeland Security chemical standard with the same commitment to compliance.

Having said that, we hope that we can work with the Department of Homeland Security to align these new requirements with those already imposed on us by other Federal agencies so long as such alignment can serve both homeland security and other health and safety goals. And also we would like to ensure that whatever approach is taken to these rules, it doesn't inadvertently weaken the national security by hindering science and engineering research and education on our campuses.

Let me briefly speak to the specific university concerns regarding the Chemical Facility Antiterrorism Standards. The higher education community was surprised to discover that the list of chemicals of interest which was published in appendix A in April included a number of compounds commonly found in our labs. If the rule were adopted with no further changes, it would apply virtually to every college and university, many hospitals, and certainly to some secondary schools. The final rule addresses risks posed by large chemical manufacturing and industrial facilities. It is not, in our view, well tailored to deal with the unique characteristics of colleges and universities, which have relatively small quantities of many different types of chemicals, which are dispersed over many labs and a multitude of buildings.

These features of universities lead to two challenges. One is the completing of the Top-Screen as it is now designed. As I have already mentioned, the campus environment is decentralized, complex and, most importantly, dynamic. On any given day, some portion of the chemicals housed in the lab is being consumed in experiments, and in another, there are new ones being acquired. We have robust systems that were developed to ensure the safe handling and disposal of chemicals. These systems and these risk assessments do not require to track the day-to-day inventories. The proposed 60-day window for completing the Top-Screen inventory doesn't provide colleges and universities sufficient lead time to collect the required information for that purpose.

Secondly, our campuses may be required to undertake a vulnerability assessment and prepare security plans. And we do expect that some universities will be asked to develop and will fall into that category. We would like to see security plans that make sense for universities, which are operated differently, than industrial concerns.

Having expressed this concern, I also want to commend the Department of Homeland Security for how it has already responded to our concerns. Specifically, the Department has recently begun working closely with the college and university community to develop a strategy for securing chemicals on campuses in a reasonable and effective way. I am pleased that the DHS has agreed to establish a working group of experts from the higher education community to consider rational and efficient strategies for inventorying and securing chemicals on our campuses consistent with the intent of the new standard. This consultation should result in a better rule, which would be easier to implement, much greater compliance, and less unintended destruction of teaching and research.

In conclusion, I would like again to reemphasize that colleges and universities are committed to ensuring safety and security of

education and research on campuses. We are grateful to Congress and the administration. We appreciate the importance of balancing security with the needs of the education and research. Thank you again for the permission to appear before you, and I would like to welcome any questions you may have. Thank you.

[The statement of Mr. Tahmassian follows:]

PREPARED STATEMENT OF DR. ARA TAHMASSIAN

*On behalf of*

American Council on Education  
 Association of American Universities  
 Campus Safety, Health and Environmental Management Association  
 Council on Governmental Relations  
 National Association of College and University Business Officers  
 National Association of State Universities and Land-Grant Colleges

I appreciate the opportunity to testify here today on behalf of the American Council on Education and several other higher education associations and the more than 2,100 colleges and universities that are their members. These institutions are a diverse group, public and private, small and large, offering associate's degrees through doctorate degrees as well as professional and post-doctoral research programs.

I am the Associate Vice President for Research Compliance at Boston University and Boston Medical Center and am responsible for all non-financial research-related compliance issues at both institutions. The university and its medical center have approximately 600 labs spread over 25 buildings on two campuses separated by approximately two miles.

Before I explain some of the challenges universities and colleges face implementing the current Chemical Facilities Anti-Terrorism Standards, I am pleased to inform the committee that the Department of Homeland Security has been responsive to our concerns and has established a working group with experts from the higher education community to consider strategies for securing chemicals on our campuses in a reasonable and effective way. This partnership is in the early stages and discussions will continue throughout the summer to reach a consensus on how best to get the job done. We are very encouraged by these discussions and the Department's recognition that college and university campuses confront unique challenges in meeting the Department's goals.

Colleges and universities are committed to the safe conduct of research and teaching on their campuses. Many colleges and universities function as small cities, complete with security forces and emergency response capabilities. They have long been subject to federal regulation governing health, safety, and security in research under the auspices of Occupational Safety and Health Administration, Centers for Disease Control, Environmental Protection Agency, Department of Agriculture, and the Nuclear Regulatory Commission. To meet the requirements of these agencies, institutions have to perform a risk-based analysis of the chemicals being used and the general type of procedures being performed in order to determine the safety measures required for the protection of employees and the environment. These measures include requirements such as training, protective personal clothing and disposal methods. Extensive new regulations for the management of select agents, radioisotopes, and visa requirements for international students have been introduced since 9-11, and have expanded the requirements for physical security of certain campus labs. Congress and the administration have recognized in recent years that a thriving university-based research enterprise is critical to national and economic security. We anticipate that the Department of Homeland Security will take a similar approach to the chemical facilities rule and find an approach that does not inadvertently weaken national security by hindering science and engineering education and research on college and university campuses.

Admittedly, the higher education community was taken aback when the Department published its interim final rule on Chemical Facility Anti-Terrorism Standards in April. Not that we hadn't read the December notice of proposed rulemaking—we had, and concluded that universities would not be considered "chemical facilities" under the rule. The proposed rule seemed to be clearly designed to address security at chemical manufacturers and large industrial facilities that possess large amounts of hazardous chemicals. College and university laboratories do use chemicals, but under the control of faculty and investigators and in small quantities dispersed over many laboratories in numerous buildings. We were surprised to discover that the list of chemicals of interest published as Appendix A to the interim final rule in

April included a number of compounds that are quite common in laboratories, often with a threshold of "any amount." In our estimation, as originally published, the rule would have applied to virtually every college and university in the country, and probably to many hospitals, doctors' offices, and secondary schools as well.

The Department consulted with some sectors of industry in developing the regulations, but it did not consult with colleges and universities about the level of risk and the best way to ensure security while avoiding any disruption of teaching and research. It is therefore not surprising that the rule and associated questionnaire (the Chemical Security Assessment (CSAT) Top-Screen) are ambiguous in several places if applied to the academic environment.

The rule presents several serious concerns, which we hope to resolve with the Department over the next few months.

First, completing the Top-Screen as it is now designed would be challenging for colleges and universities, especially within the short, 60-day deadline. The research environment is decentralized, complex, and most importantly, dynamic. Some institutions have more than 1,000 individual laboratories. Our research endeavors are not static but constantly changing as researchers adjust their approach and explore new questions. On any given day, some portion of the chemicals housed in these laboratories is consumed in experiments and others are purchased or prepared as mixtures. Most of these chemicals are stored in small containers, typically ranging in size from tiny vials holding a few milliliters up to five-gallon bottles. Unlike other types of industrial facilities, few institutions have centralized inventory or purchasing controls in place. Colleges and universities need sufficient time to set up systems to track specific items, if they are expected to meet new regulatory requirements.

We have been assured that the Department is revising the list in Appendix A in response to comments and consultations, but we have not yet seen the results. Depending on the specifics, this may very well resolve a number of issues and provide relief for many smaller institutions of higher education. Because of the nature of our research facilities, we still need lead time after the list of chemicals of concern is finalized to put proper tracking systems in place.

Our preliminary discussions with Department officials have indicated their willingness to consider the design of the Top Screen and the best way to collect useful information from colleges and universities.

Second, once an entity has completed the Top Screen process, it may be required to undertake a vulnerability assessment and prepare a security plan. Most of us expect that some universities will be asked to develop a security plan. We appreciate the Department's performance-based approach to the requirements for such plans but would like to see revised criteria for higher education institutions. We are encouraged that DHS has said the requirements for security plans will reflect the level of risk of attack, sabotage, or theft at a particular institution.

We hope that we can work with the Department to develop a framework for university security plans that reflects an understanding of certain factors that are common across colleges and universities. Universities present a low risk for toxic release through theft, sabotage, or attack. The distribution pattern of chemicals across many laboratories on a campus reduces the risk of a toxic release on a significant scale. We are aware of the need to ensure the safety and security of our campuses and we have instituted appropriate measures.

However, we also encourage a policy of open access to campus laboratories. We want all students, not just chemistry majors and doctoral students, to have hands-on research experience. At a time when there is a national concern about the availability of highly trained, creative scientists and engineers to lead our high-tech industries, we should do all we can to promote undergraduates especially to seek out research opportunities. Locking laboratory doors or limiting access to entire buildings may have the unintended effect of discouraging students from getting those first-hand experiences that at a minimum promote scientific literacy and, in some cases, may prompt a student to specialize in science.

We hope that DHS will take a broad view of risk in its assessments of risk (or undertake a cost-benefit analysis) and will consider the potential effects on science and engineering education and the productivity of university research groups.

As I said at the outset, we are pleased that the lines of communication with DHS are open. We are grateful that the Department of Homeland Security is willing to recognize the special circumstance of the education sector. Additional time for consultation about the level of risk on college and university campuses and the ways in which chemicals are handled, used, and stored will result in a better rule and greater compliance. We hope to reach agreement about the collection of relevant information about chemical inventories at colleges and universities and on common elements of security plans. Colleges and universities are committed to ensuring the

safety of education and research on campus; we are grateful that Congress and the administration appreciate the importance of balancing security with the needs of education and research.

Ms. JACKSON LEE. Let me thank all of the witnesses for their instructive testimony. And as I begin my questioning, we will proceed by asking questions of each of you. If there is someone who desires to answer the question, or add to the answer or offer a different perspective of the witness that I questioned, please acknowledge, and I will be happy to expand this record. This is very key to, one, the oversight that we are responsible for, but at the same time it is a part of the instruction manual for a more extensive review of these questions of chemicals and the need for further legislative response. Several good points have been made here. But I do want to refresh the witnesses' memories. And as I do so, again let me thank Mr. Scott in particular, because we know the long history that Dow Chemical has had. It is a well-known American fixture, if you will. And it has a history of being attentive to these concerns. And so we appreciate the testimony that you have given. And as you reflect on my statements, your appreciation for your attentiveness, please also reflect on the points that I am about to make. Chemicals are benign until they are used in an untoward manner. So most of us would have considered fertilizer and ammonia somewhat benign prior to Timothy McVeigh. And now we look at ammonia and fertilizer and other elements and various moving trucks—I don't want to call on a particular name brand—somewhat suspiciously. That is why we are in this committee room today. I take with extreme seriousness and sensitivity a thriving chemical industry. I also reflect upon what Americans are used to, freedom, freedom to design, research, think, move goods. But unfortunately, and this statement I don't mind our enemies hearing, we have to turn more inward. We have to be more vigilant. And that is why we, if you will, established this committee, to include critical infrastructure, which is well known to be predominantly in the private sector. But we are acknowledging that creativity on chemical uses outside of the chemical plant, materials that could be secured, particularly at the universities, and we are certainly respectful of how attentive universities and some are probably becoming, but we do know that there is the very sure possibility that those who are intending to do harm can find any number of ways to use innocent products to do so. And I would like you to answer my questions in that backdrop so that we can be constructive as we proceed. I am acknowledging that DHS is in negotiations with a great number of those who have different perspectives. I will be asking them to provide us with a briefing as they move toward any decision-making. It will be very important that Congress is included in this loop, primarily because even from last week we live in a different time.

Mr. Crowley, then my question to you, as I have asked Secretary Stephan, and would you expand on two aspects? One, the seam, I think that is a very important point, the seam of the travel of chemicals, whether or not we have enough funding as you perceive it, having been in government, to develop legislation along the concept of seam. Let me be very frank about jurisdictional issues. I think this should be a homeland security issue singularly, because it relates to security. But when you think of seam you might have

jurisdictional questions, because a seam requires transportation modes. But, again, if it is transportation security, it falls in this subcommittee and Homeland Security. So the question of seam. And I don't know if you have had the opportunity to look at the regulatory scheme we put in place in last year's and then the appropriations language. I don't think we are finished. But whether or not there are sufficient resources, and as you listened to the Secretary, sufficient staffing that would give you the comfort that if you had to sit here today and say that we were moving toward securing ourselves against al-Qa'ida, that you would be able to say, with the backdrop of your experience, that we are almost there, that this is the right direction, that we don't need do any more. Mr. Crowley?

Mr. CROWLEY. Yes, ma'am. I would say we are moving gradually in the right direction. What concerns me is I think as we have reflected upon what is happening in Iraq, for example, the threat is advancing faster than we are taking steps to meaningfully reduce risk. Your comment on the seam is dead on. Right now, we are treating chemical security as one phenomenon. We are treating rail security as a separate phenomenon. And I would encourage the committee at some point to try to put those together into a comprehensive approach. Right now, on the rail rule making, for example, the process comes down to keep the stuff moving, you know, through the system. I don't think that is adequate from a security standpoint. I absolutely—what Mr. Markey said about the gap, the chlorine gap, I think that is fundamental. Chlorine, as we see, is perhaps the chemical that already is in the sights of al-Qa'ida. And as I said in my testimony, if they ever get a chance to perfect what they are doing in Iraq, it will be on the Internet. It will be available and be an incentive for those who want to try to do something similar here. So finding ways to reduce the length of our supply chains I think is critical. And I think Mr. Scott and Dow have some ideas on how to best do that. I am gravely concerned, as I sit here and listen to Col. Stephan, and here we are, we are in the process of initiating and implementing a regulatory framework, and he is still looking ahead to funding and personnel that he doesn't have right now. I think there is a serious question, when you look at the Top-Screen is going to capture tens of thousands of chemical facilities in their tiering, they are likely to capture at least several thousand facilities in their tiering. And if you do the math, they have right now perhaps, you know, something like one person evaluating a thousand facilities. That is not going to work. It appeared to me that he was talking about having different kinds of oversight based on the level of risk. But we have to make sure that those areas that are clearly performing a critical security role, that function has to be reserved for government employees. And that is not an area that I think can be effectively done by the private sector.

Ms. JACKSON LEE. With nonclassified speculation, what magnitude of an incident could occur with chemical plants?

Mr. CROWLEY. Madam Chairman, my metric in this whole thing exists right down the street from where we sit. If we eventually develop a chemical security regime that allows CSX to transport hazardous material, including TIH gases on the rail lines, two of them that go through Washington, D.C., because we recognize that the

Capitol, for example, was a target on 9/11. Thankfully, they weren't able to get here. But if the regime allows that to happen, then I don't think we have genuine chemical security. So that is, I think, as we go along, we have to find ways to link chemical security, what is happening in the fence line, but the regime that DHS develops must take into account and assess the risk that is posed by the transportation of chemicals between a manufacturer and a user. The highest point of risk could well be in the middle of that supply chain. And if DHS's system is driven by an assessment of risk inside the fence line, without taking into account what is happening in the supply chains, then I don't think we will end up with real chemical security.

Ms. JACKSON LEE. Let me thank you. And before I go on to Mr. Scott, you mentioned Iraq. Let me mention it again, because there is an element of the lack of expertise that a layman, in quotes, maybe what is perceived to be a terrorist, a regular terrorist fighter, those terrorists that are being trained by the conditions in Iraq, which I think are well publicized and documented, that we are multiplying the number of terrorists, young terrorists, individuals that are keyed in to an incident in this country. Is there the necessity of extreme intelligence, technical training, years of experience to make something happen with toxic or explosive chemicals that have that base, Mr. Crowley? Is there a need—do you have to be vastly experienced to be able to participate in something dastardly happening?

Mr. CROWLEY. Not necessarily. The good news is that as we move down the scale from—

Ms. JACKSON LEE. That is the bad news. The question was, do the terrorists have to be sophisticated, trained, knowledgeable Ph.D.'s to make something happen with chemicals?

Mr. CROWLEY. Not at all. And the physicians in Glasgow and London, that is the good news and the bad news, they weren't successful, but all they needed was a better bomb maker. But they are focused on things that are familiar to them, and they are focused on familiar targets. And what is chilling to me about Glasgow and London is they got to their intended targets. They weren't discovered by intelligence agencies or law enforcement in advance. Thankfully, their bombs didn't work, but we can't rely on that every time. But the short answer is, these are highly educated people, but they are not necessarily scientists.

Ms. JACKSON LEE. Thank you, Mr. Crowley.

Mr. Scott, it leads me to you and to, again, restate my appreciation for what Dow has done as a representative of the industry. And also to go right to what I understand has been discussed by Dow as its recognition of the different levels at which different States and their regulatory scheme is and Dow's willingness to accept different State rules and laws. Is that still what Dow is prepared to do, if there were States that had more secure regulations that your facilities were in or any chemical industry facility was in? Is it just the willingness to accept preemption?

Mr. SCOTT. Before I answer that question, I would like to build on a couple of points that Mr. Crowley hit on if I could do that.



Ms. JACKSON LEE. If you could just answer this one yes or no, the preemption, are you willing to cede to some of the States that have different laws from the Federal Government?

Mr. SCOTT. We think there should be a strong enough national law, national regulation in place that the States would say, that is strong enough; we don't need any more. But we recognize that there are areas where States have some special issues that they need to address. And if that is the case, we support the States' rights to put regulations in place to address those issues, as long as they are not in conflict with the national regulations.

Ms. JACKSON LEE. I thank you, and you may respond to some of the points that Mr. Crowley was making.

Mr. SCOTT. Thank you. Just a couple of points. On the gaps between supply chain and site security, one of the things that we are really looking at with our integrated approach to security is just that. How do we build layers of security around critical assets on our sites and then extend those layers of security through the entire supply chain to our customers through any routes of modes of transportation to our customers? Because what we want to try to do is build a security line from beginning to end of the chemicals that we work with that our Nation needs. And we think that is a doable. That is a manageable project if we can get our arms around that and get everybody involved in that from all aspects. So we would support that. And the integration of our supply chain with our site security also allows you not to shift the risk from one area to another. You address the entire supply chain. The other piece of that is any gaps between—or the options on rail and security. There are toolkits out there of a wide range of tools that we can use to improve security, whether it is supply chain or whether it is at the site security, the physical security level. And what we are supporting is the use of any one of those tools, whichever tool makes sense to make the most effective improvement in security. Thank you.

Ms. JACKSON LEE. Let me pursue this line of questioning with you, and note that you have been a strong part of the Chemical Sector Coordinating Council, doing a lot on trying to enhance chemical security. And with that in mind, you have been a leader on the possible broadness of these regulations, sort of having a massive sweep of facilities with small quantities or other types of facilities, that may not be chemical, that might have small quantities. I pose the question in a way that we are all thinking now. A small amount of a chemical in one place and a small amount in 10 other places brings together a batch that may be deadly. And so in the spirit of trying not to inconvenience, are we truly true to our commitment, which is to secure the homeland? Is there not a better way than to take these small quantities off the lists? Can you expand on that, your view that it is too expansive and the regulations are drawing in some that do not need to be drawn in, but one small batch can be multiplied with other small batches? We are talking about the potential of terrorists who will use all means of creativity to do harm to this Nation. Mr. Scott?

Mr. SCOTT. We think that DHS is taking a risk-based approach. The Top-Screen and the CFATS are taking risk-based approaches. And as far as the levels, the amounts of product or chemicals that

are involved in appendix A, we haven't seen the final list yet, so we don't really know what is there. But we believe any facility, regardless of whether it is a chemical manufacturing facility or a very small facility that has a high risk of theft or diversion, off-site impact or anything that can be weaponized should be included in the regulations.

Ms. JACKSON LEE. What is your opinion about sunset?

Mr. SCOTT. The sunset I believe sets up very perceived deadlines that rush the process or seem to rush the process. And we have seen a couple of cases, not just with DHS, but in other areas where, when you rush to a solution, you don't get the most effective solution. So a sunset, we think, just puts in some arbitrary or perceived deadlines. And we would like to see DHS be given the amount of time that is needed to effectively implement the implementation. We think they have taken significant steps in the right direction. We want to let them continue on down that path.

Ms. JACKSON LEE. Thank you for that. That is one issue that we are going to look at very closely, as to whether or not the sunset works for us or against us. I know that you are here with a very strong handle on the industry and a very strong sensitivity to the industry. Do you think we have a lot more work to do? Not every holder of chemicals is a Dow Chemical. And so I think it is important for Congress to hear it straight. Do we have a lot of work to do? Chemicals are held in many, many different facilities. Again, I have asked this question to each of the witnesses so far. Your opinion on that, please.

Mr. SCOTT. We push very strongly for legislation just for that reason. We think that there are a lot of companies out there and a lot of associations that have taken a leadership position and put in voluntary security upgrades at their sites and the supply chain and done this on a voluntary basis. But we thought the need for regulation was there, and we have supported that because we need to get a lot of other players involved that need to be involved in the process.

Ms. JACKSON LEE. Thank you very much.

Mr. Alexander, your employees are on the front line beyond the issue of security. Over the years we have seen coming from my part of the world, chemical accidents, explosions, loss of life. You mentioned your concern about the tiered risk system; everybody is at risk. You want to explain that further?

Mr. ALEXANDER. Well, in the regulations here, when it talks about a high risk versus low risk or other tiers, it identifies a list of issues that have to be addressed for a high-risk facility. And it insinuates, it doesn't say what would have to be done for the lower risk, but it insinuates that it would be a different list depending upon the associated risk. And our opinion is that the issues that are listed in there are issues that should be addressed at every facility, whether it is a high risk or a low risk. If you are going to say that, because it is a high risk, you need to follow that list that is in there, and if you did follow it, and if that did deter someone from being a terrorist and using that as a facility for threat, then why not go to a lower risk one and do the same thing if it doesn't have the security? So what we are saying is there shouldn't be a differentiation between any of them. They are all a risk. They are

a risk to the workers. They are a risk to the communities. And what we all know, from the people dealing with the chemicals, is even a low-risk facility can have catastrophic events if the people, the terrorists were to act in a way such that it would cause a catastrophic event. So we feel that it should be the same.

The one thing that we disagree with on that list is the background checks. Background checks for people that you are hiring, we understand, and most any company that uses any good sense would have background checks before they hire someone. But background checks, what we have seen in a former Department of Homeland Security regulation that was passed, have been misused against workers who are actually already at the site and have been working there for years. And in the Maritime and Department of Transportation, they have had to add more provisions; where if a person is accused or been found to have a felony within a 7-year period, and now they are a terrorist threat and the company has a right to fire them because of that, they have added provisions so that they can appeal that decision. And in this regulation, there is no way to appeal it or anything else. So if a company wanted to target a particular worker and dismiss them for obviously other reasons, and they could do that. Then it can happen. And it has happened. It happened in the maintenance of way. And that is one reason why they had to add those provisions. So we don't understand why those provisions aren't in this one.

Ms. JACKSON LEE. Let me first of all say, Mr. Alexander, we faced this issue before. We faced this issue with the Department of Homeland Security. Your raising this, as we look to a more comprehensive approach, even though we have had two bites at the apple on chemical security is one that we will take under advisement. And I think it should be clear that you are not suggesting that we do away with background checks. You are suggesting that, in the background checks, it should not be used as a basis for terminating individuals who have been there and working and very much a part of the particular company and may have something in their background that has nothing to do with their propensity toward terrorist acts. And that is something we want to be aware of.

Mr. ALEXANDER. Right.

Ms. JACKSON LEE. Let me ask you just two more quick questions. Would more employee training, as we have looked to do in other critical infrastructure industries, be helpful as well, that the actual—there be a requirement that the workers be engaged in thwarting potential terrorist acts or what to do, but basic worker training as it relates to security in these plants?

Mr. ALEXANDER. Absolutely. We feel that the workers should be involved in every aspect, including training. If there is an attack, you have to know how to shut the process down, how to deal with it. If you have an attack that causes chemicals to be released, what are you going to do with the rest of the process? Is the whole thing going to go up? Training with the workers on how to deal, and you only have minutes. We have some provisions in the law under emergency response at this particular time that gave a loophole, so to speak, to companies that didn't have to train workers where they could count on services from outside the plant. And what we

have found was what is most critical is the time. Whenever you have an incident, you have to act as quickly as possible. And by training the workers and having people on-site that know how to deal with that would certainly reduce an event from being as catastrophic as it could be.

Ms. JACKSON LEE. You mentioned safer technology, and you seem to suggest that, other than establishing the risk-based strategy, we don't have anything that encourages these companies to go out and buy, go out and seek, go out and investigate safer technologies. Is that the point you are making?

Mr. ALEXANDER. The point that I was making on safer technologies, there is nothing in this regulation that either requires or recommends a company to seek safer technologies. And even though it may result in a benefit to the company by doing so that might take them off of a risk, there is nothing here that says it. One of the easiest ways to eliminate the chemicals, not that you could do it with all of them, but chemicals from being transported, for instance chlorine—chlorine is the easiest example, and probably the most likely chemical that someone is going to try to use, and I think that is why you are seeing it coming up missing now—is don't use it. And there are plenty of substitutions for chlorine that can be used.

But the first thing that Mr. Crowley talked about—not the first thing, but one of the things he talked about—is water treatment plants being exempted. And Mr. Markey talked about them. That is where the chlorine is at, and they are exempt. And they have the ability to use substitution chemicals that would not be nearly as dangerous or even comparable to using chlorine. So why they are not part of this regulation is a really good question. And why isn't this regulation encouraging, you know, or recommending at least, if not requiring, companies to seek out inherently safer technology, not just a substitution of chemicals, but the process itself, the mechanical process that they are using? We have ways of protecting the facilities better than what they are being protected now.

Ms. JACKSON LEE. Mr. Crowley, quickly, does that make sense to you?

Mr. CROWLEY. It absolutely does. I don't think that it is for the Federal Government to dictate a specific solution to any chemical manufacturer or user. But if, in the process, you now have inherently safer and secure alternatives as part of that process, as one tool, then what it will do is it will dramatically reduce our level of vulnerability. And then we can deal with those residual chemicals and processes that don't lend themselves to an alternative, you know, through an effective means.

But certainly in the research that we have done, we have clearly shown that there are viable and affordable alternatives out there. We surveyed a number of facilities. Some of them are changing, but many are not. And there is just this inertia that I think the regulatory process can help with. And many facilities can convert from an existing dangerous, inherently dangerous process that can be exploited by a terrorist to a safer alternative at modest cost.

Mr. SCOTT. Madam Chairwoman, if I could add to that, please, I would like to point out, we would also support, as one of the many tools that you have in your toolkit, an inherently safer tech-

nology, both in process design and product use. But just for the record, I would like to also point out that chlorine does account for—is used in 93 percent of all pharmaceuticals, 25 percent of all medical plastics and 86 percent of crop-protection chemicals. It is a basic building block for many of the things that are in our culture today.

Ms. JACKSON LEE. Is that chlorine?

Mr. SCOTT. Chlorine.

Ms. JACKSON LEE. Which means the import of your statement is, it would make it difficult to remove.

Mr. SCOTT. There are opportunities for use of inherently safer technology, but chlorine is a basic building block for everything we use in our world today.

Ms. JACKSON LEE. Mr. Alexander, I asked everyone else, do you think we made any progress on being safer as it relates to chemical plants, as relates to your employees, who are, many times, employed by these companies?

Mr. ALEXANDER. I think we are making progress. There is no doubt we are making progress. And I was happy to see some of the suggestions that we made earlier on were adopted in this regulation. But there certainly are some things that we need to consider along the way of how they may adversely affect other situations, like for instance the workers in the workplace. You know, if you create a law that is going to take away rights of workers and rights of the community for right to know and the ability for their representatives to investigate and protect the workers, then we are creating a problem where there was none before. So we just ask that you carefully consider and put some stipulations in here, the original stuff that was written, where it basically said they would not just preempt State law. The original stipulation said, they would preempt any law. That is the exact words that were written in there. And we can't allow a knee-jerk reaction to ignore what we have fought for years and years for rights for workers in the community to try to protect our facilities. Not that we shouldn't protect our facilities, but we need to be careful that we don't take away other rights that will endanger communities and workers. So by taking away those rights, then you have an adverse effect. So we need to just be careful. We are all about moving forward and making the facilities safer and less of a threat. There is no doubt about that. But we just need to be careful how we move forward to make sure that we don't cause an adverse effect.

Ms. JACKSON LEE. Well, let me acknowledge the work that we have still to do and the components that each of you represent, and particularly employees that are either on the front line of safety or on the front line of security are a key to what we are trying to accomplish here. And so your continued involvement would be welcomed.

Mr. Tahmassian, let me thank you for representing the university community. The last thing we want to do is to stifle research and development, which is the cutting edge of the Nation's economy. But I am reminded, frankly, of, again, without being redundant, of the climate in which we live. It has been recently publicized that terrorist cells are in the United States. Cells by their very definition may be one person or two persons. They may be 10

persons. But we do know that they are, by the able of definition of cell, nuclear, able to move around, small. That means university campuses can be vulnerable. So I would welcome your explanation as to why, if we found a way to manage the universities, know that you are on a particular budget, that universities should not be included?

And my second question is that large universities are probably more susceptible to resources to do what you have just suggested, Boston, Boston University. But we have thousands upon thousands of colleges and universities that have chem labs and are handling various chemicals. What is our response to them?

Mr. TAHMASSIAN. Madam Chairwoman, we are really not asking to be completely excluded. What we are asking is a process by which the standard is sort of adapted to the different environment of the universities. If you look at the universities—and again, we are going by the first version of the appendix A that we saw. To obtain the 2,000 pounds, to be very specific—and I can give you an illustrative example. Nitric acid, which is very commonly used in almost every chemistry lab and almost every biology lab, has a threshold of 2,000 pounds. If you roughly assume that one gallon is equivalent of 10 pounds, and the majority of the labs in a university environment at most will have 1 gallon of it, that means to obtain that 2,000 or to hit the 2,000-pound threshold, you literally have to go to something between 200 and 220 labs, which might be to different buildings, to reach that threshold. So what we are really looking at is, how do we define those kind of thresholds that make sense for the university environment rather than saying that we want an umbrella exclusion. I don't know if that answers—

Ms. JACKSON LEE. If I am hearing you, you are saying, do not exclude but be responsible to the prototype of a university and what it means and how much quantity you would have.

Mr. TAHMASSIAN. That is correct.

Ms. JACKSON LEE. In the regulations, then, would you welcome defined regulations that might single out the university and college community so that there would be requirements, but they would be requirements that would be responsible to the business that you are in?

Mr. TAHMASSIAN. Yes.

Ms. JACKSON LEE. One of the things that is distinctive is, we don't do background checks on students. And the campus is the bastion of freedom of expression. And so there lies all kinds of speculation. Who would have ever thought in the series of London bombings and Scotland that caregivers, medical professionals would be involved? No one has yet reported whether or not the materials that they found, and I don't know if the nexus has been made, was connected to their profession. But, certainly, in a hospital, you are very much part of having access to chemicals. And certainly hospitals are on our list for critical infrastructure and concerns that we will be raising as they care for those who are in need. But if that be the case, then we would want to work as carefully as we can.

But why don't you respond to just the broad point that I made about students and lack of background checks? Mr. Alexander said

he has a problem with background checks. He just doesn't want it to be used against long-standing employees. And we have had that issue before, and we are going to work with them. But what is your level of protection, professors and others? Very difficult with this whole idea of freedom of expression and freedom of speech, which is where this is supposed to occur.

Mr. TAHMASSIAN. The issue of background checks in the university overall for employees is not new. We do background checks on a number of what we consider sensitive—for example, many people who currently work with finances, and if they are handling cash, including at the hospital, they are subject to background checks. I think the question of the students is a little bit more complicated, because, as you indicated, we have not been in the business of background checks from a criminal perspective of the students.

However, when the students are on the campuses, the majority of the campuses do have programs where the faculty, the professors, the teaching assistants are actually now trained in looking for certain behavior patterns and seeing if there are things which are unusual. And these are not necessarily just from sort of looking for terrorism. That is not what I am implying. It is if there are behavioral changes that we think a student might be having difficulties, is depressed. And these are brought up to the attention of the university officials who have appointed actually social workers, psychiatrists, psychologists that will talk to the students and try to monitor them. I think that working within a framework such as that, we might be able to come up with a solution that meets the security requirements, as well as the university.

Ms. JACKSON LEE. I don't want the pronouncement out of this hearing that the committee has decided to background check all the Nation's students. But I do want to express a concern to you about those who are the caretakers of labs, researchers, faculty, again, not stifling educational freedom. But this is the kind of microscope that we have to begin to look at in America; not to stifle thought and stifle research but to be currently aware that we live in a world where al-Qa'ida is not isolated. It is franchised, and it moves around.

Ms. JACKSON LEE. And it may be in places where we would least expect it. So when we look at a comprehensive approach, that is why you are here today, because we want it to be sensible, responsible but serious, and the last word, of course, is "comprehensive."

I would encourage you to look back on your whole university council and the issues that I have just raised. Even though small amounts may be at these various chemical labs and in research components of universities, they might not have to go to 200 universities to secure what they need. It might be one university or a series of universities, and that is not a difficult task.

Let me thank you for your testimony.

I am going to conclude, Mr. Crowley, and let me just ask everybody the question of how secure you feel we are with our efforts toward chemical security and particularly as it relates to universities.

Mr. TAHMASSIAN. I think we have made significant progress over the last 6 or 7 years. Seven years ago, nobody thought about security the way we are thinking about it now. Most of our security was

securing the environment for our faculty and for our students so their personal belongings do not get stolen and so they do not get attacked and so on. Today, actually, as you walk into the facility, name badges are displayed by everyone. People challenge you if they do not recognize you in the lab. We have made a fair amount of progress. Obviously, like anything else, there is a lot more that could be done; and we continuously need to be vigilant and to look at how we can better perform than we have done in the past.

Ms. JACKSON LEE. Let me thank you very much for that assessment. It gives us a broad view.

Mr. Crowley, the end is going to be beholden to you. Are we at a crisis? We are reading the national intelligence estimates, some of which have been publicized, so that we are speaking from what we have—those who are here, I will speak to what has been in the newspapers. The national intelligence estimates, as I have characterized, indicate that al-Qa'ida is moving around and has franchised. This committee has an enormous responsibility to address the question.

We are, in the 9/11 conference, trying to meet some of the requirements such as the screening of 100 percent of cargo, which is part of your scene; and, of course, there is opposition to that. Do we have any latitude of being lax on ensuring a very pronounced regulatory, comprehensive process for chemical security?

Mr. CROWLEY. Chairwoman Jackson Lee, I think the crisis, if we have it, is one of focus. I mean, obviously, the longer we get from 9/11, the good news is we have not been attacked, but we are becoming complacent. I think that is probably the greatest thing that we have to overcome.

Dr. Tahmassian earlier mentioned the fact that, through this process that we have started with chemical security, they now recognize that they are part of this. They did not expect that so many universities would be captured by the preliminary list that DHS puts out.

I think that is exactly the process that we should be having here, that all entities across—you know, and I mean there is a wide latitude in terms of what we consider to be a chemical facility. There is a full range of activities here. But certainly the process is beginning to help various companies and entities recognize that they have to be part of this security equation.

I think what the good news is about this Top-Screen is it begins a process. It begins a dialogue with, perhaps, some entities that did not see themselves as part of this security equation.

So I think the bad news here is that we are becoming complacent. We have bought into some rhetoric that has been used in the political realm that we are fighting them over there so we do not have to confront them here. The reality of what we saw in Glasgow, Scotland, is we are likely to confront them here; and we may not have the intelligence that tells us where they are so that we can stop them in advance.

So we have to rely on processes like this one, and then through that process you begin a dialogue so that you can get at the heart of the security concern and address that, establish positive responsibility by various entities that have possession of dangerous



chemicals and establish a process where we can, over time, significantly reduce this risk.

Ms. JACKSON LEE. Let me thank the witnesses very much for their testimony. Mr. Crowley, Mr. Scott, Mr. Alexander, and Mr. Tahmassian, let me thank you very much. You have given us a roadmap.

The other part of the scene that Mr. Crowley speaks to is the whole idea of intelligence, and that is certainly the responsibility of this committee and other subcommittees, having the intelligence to be preventative. But, at the same time, as we glean intelligence, if for one moment our intelligence slips, which all of it is based on human opportunities and abilities, then we must have, on the other hand, a high, high barrier, a very high mountain of prevention. I am not in any way satisfied that, as we sit here today, we have covered or are beginning to cover—though, I think we are making great steps, and I am very appreciative of the sectors that, on their own accounts, have sought DHS. They are to be applauded. But there are human elements to that. There are human interests. There are interests that are all involved.

So I am not convinced as chairperson of this committee that we have, frankly, reached the vastness of where we need to go. I have heard the words “tens of thousands.” So that means that we have the able representation of Mr. Scott, very able, and the presence of the council here, but, beyond that, there are tens of thousands handling chemicals in America who are unsupervised, who are unwatched and who are certainly not ready to face what potentially may be a terrorist incident.

This overview is to engage each and every one of you. We will not do it in a vacuum. We need to do it quickly. I do not think what has been done is enough, and it does not in any way give me comfort that we could not foresee in days or in weeks ahead someone’s taking license, unfortunately, in the climate that we are in. That is our responsibility, to be able to stand up and say that we have done all that we could to prevent a horrific incident that could be reflected through the words of Mr. Markey in his comments about chlorine—and respecting Mr. Scott’s retort on that—but also as to any number of chemicals.

I am not satisfied that our employees who are handling chemicals outside of the industry are trained. I believe we need more monies for surrounding neighborhoods—some of the greatest victims or vulnerable persons as relates to the use of chemicals in a terrorist act, and certainly, some of the nuances that have been said—fairness with background checks, responding to the universities, responding to the chemical industry—are all in place, but, as we leave this room, the question is have we done what we need to do to not read a headline this week, the next week and the next week. Your testimony will help us move to that point, I hope, but, for me, we are not moving fast enough.

So I thank you all very much for your testimony and for your presence here today. It has been constructive and instructive, and I hope that we will be able as a committee and as a Department to work together.

Let me finalize by saying the members are in different places. There is legislation on the floor, any number of committees because

we are nearing a point of a recess, of a work recess. So I do want to say, on behalf of the members, that they will submit their statements into the record. They appreciate the testimony. The ranking member was called off to a meeting.

Likewise, I appreciate your testimony. We work together on this committee in a bipartisan manner, and I hope that we will have that opportunity to do that in the name of the American people, to step in front of, if we possibly can, any potential incident as a result of the oversight of our particular committee.

Thank you all. This hearing has now come to a close. Any further statements will be submitted into the record.

[Whereupon, at 3:55 p.m., the subcommittee was adjourned.]

